

THE OPEN UNIVERSITY

A HISTORY

DANIEL WEINBREN

THE OPEN UNIVERSITY

A HISTORY

This analysis of The Open University's precedents, personalities, politics and pedagogies contextualises learners' experiences and illuminates the change in the values of our society, our ideas about learning and our use of a variety of media.

In April 1963, Labour Party leader Harold Wilson sketched a proposal for a University of the Air. He launched the idea that autumn and in April 1969 The Open University was granted a Royal Charter. Aiming to be inclusive and open to people, places, methods and ideas, it has supported the learning of millions. Despite hostility from politicians of the left and right and from some within the BBC, the civil service, the academy and the press, it has won a permanent place in the affections of the nation.

The Open University has continually produced relevant, successful innovations in teaching, technology, student guidance and ideas about learning for a wide variety of adults, including those without A-levels and those with disabilities, in prison, in the Services and with full-time jobs. Its supported, open learning strategies have enabled living rooms to become laboratories, telephones to be used for tutorials and the internet for collaborative learning.

Now the clear leader in part-time provision it is subject to the same constraints and opportunities as other universities operating within an increasingly globalised marketplace. This account of The Open University's development sheds light on wider social and political developments, and on the history of learning by adults. It reveals how this single institution has transformed the notion of the university, within Britain and across the globe.

Daniel Weinbren is a Fellow in History at The Open University

Cover: Robin Wilson presenting an OU lecture in the 1970s © The Open University

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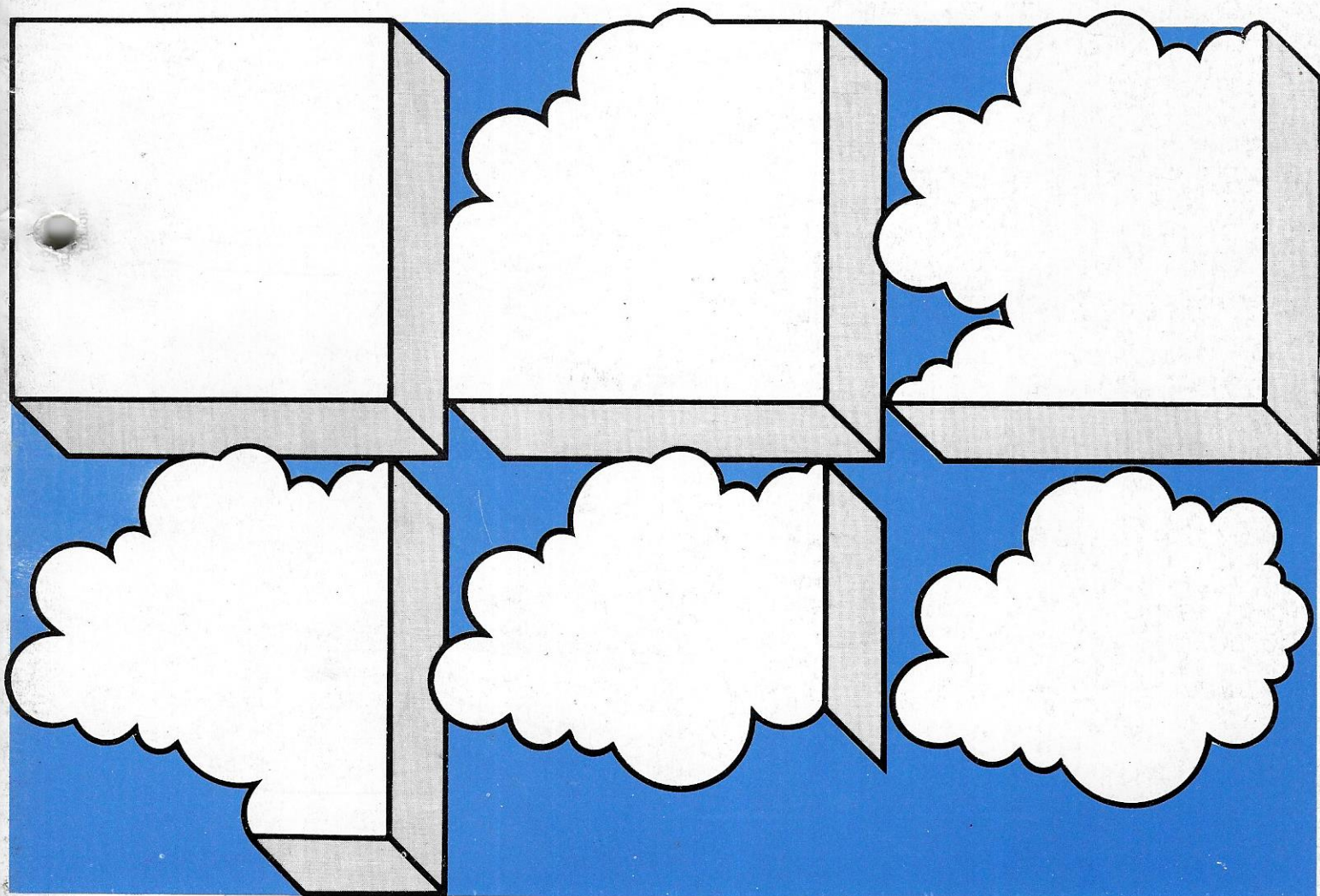
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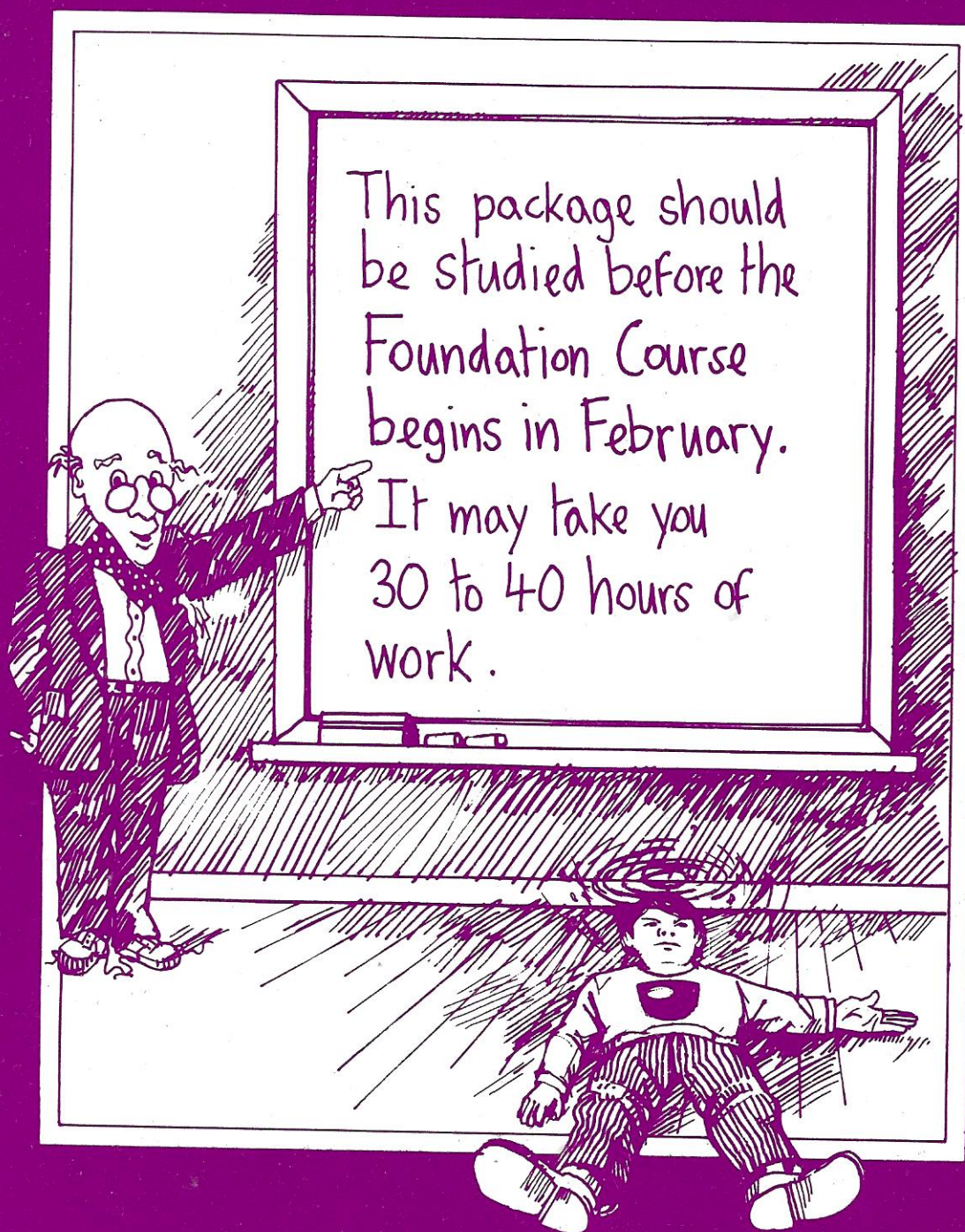
LEARNING AND DOING MATHEMATICS





THE
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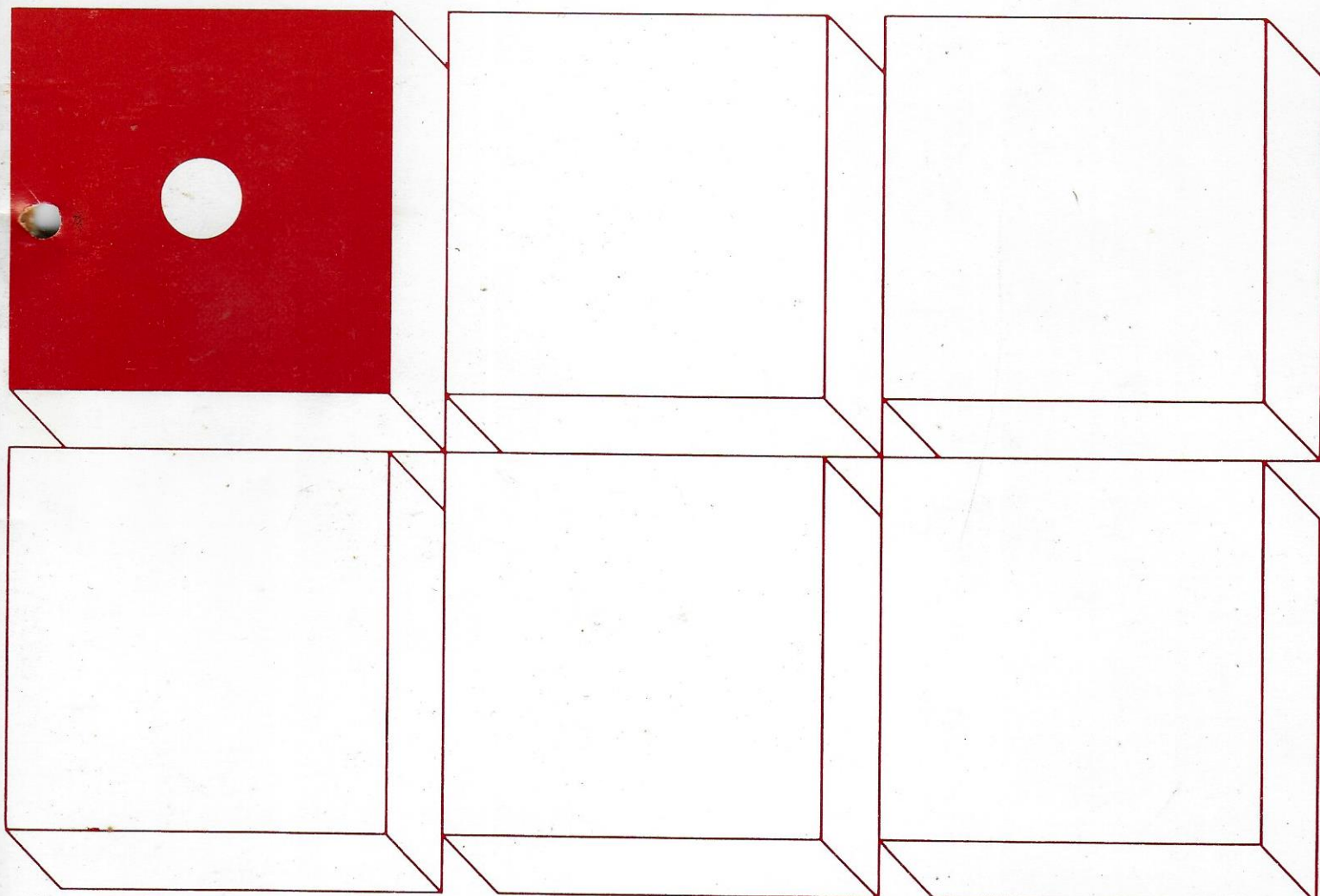
Preparing for the **MATHEMATICS FOUNDATION COURSE**





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Mathematics Foundation Course
Block 1 | Beginnings
Unit 1

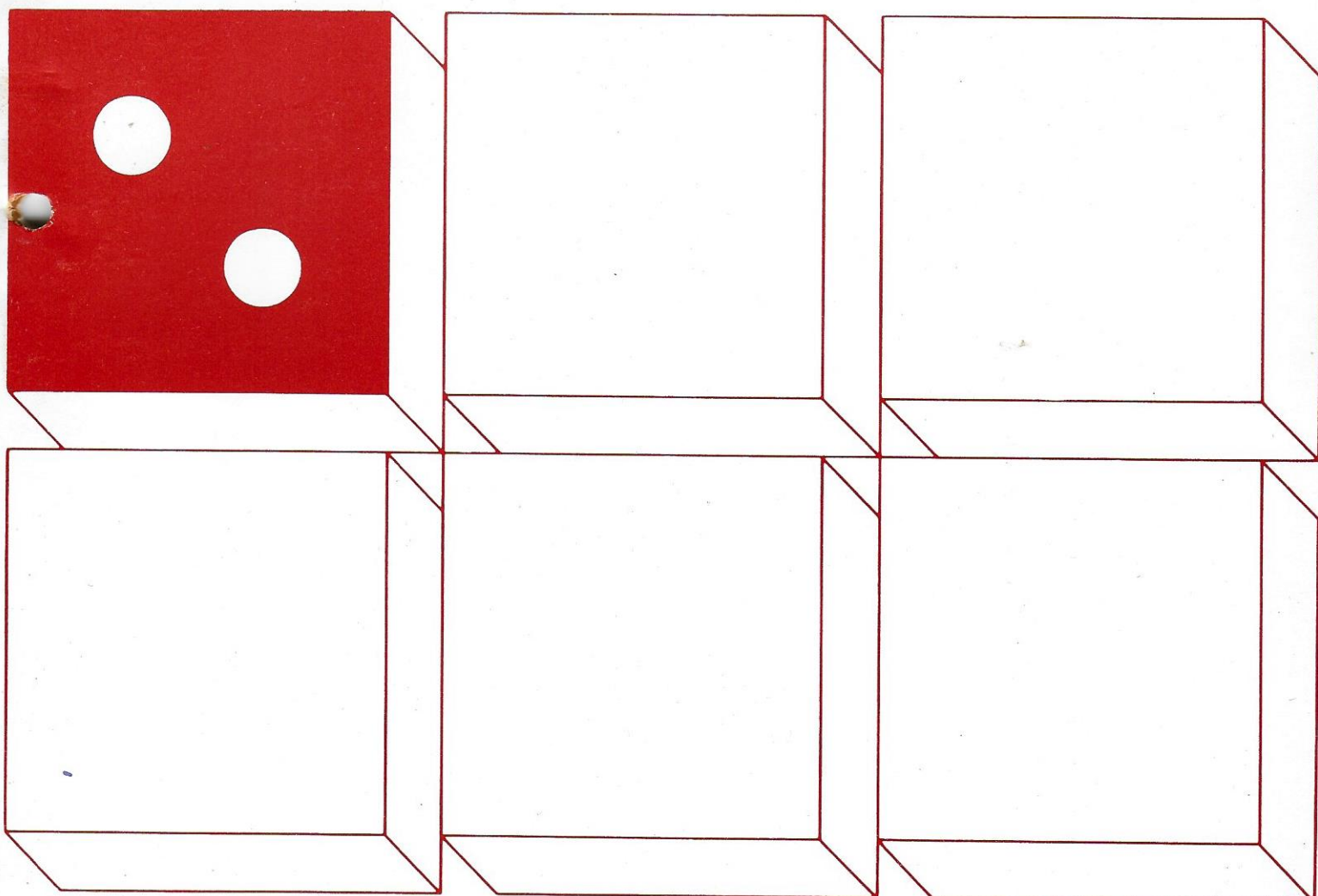
COMPUTATION





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Block 1 | Beginnings
Unit 2

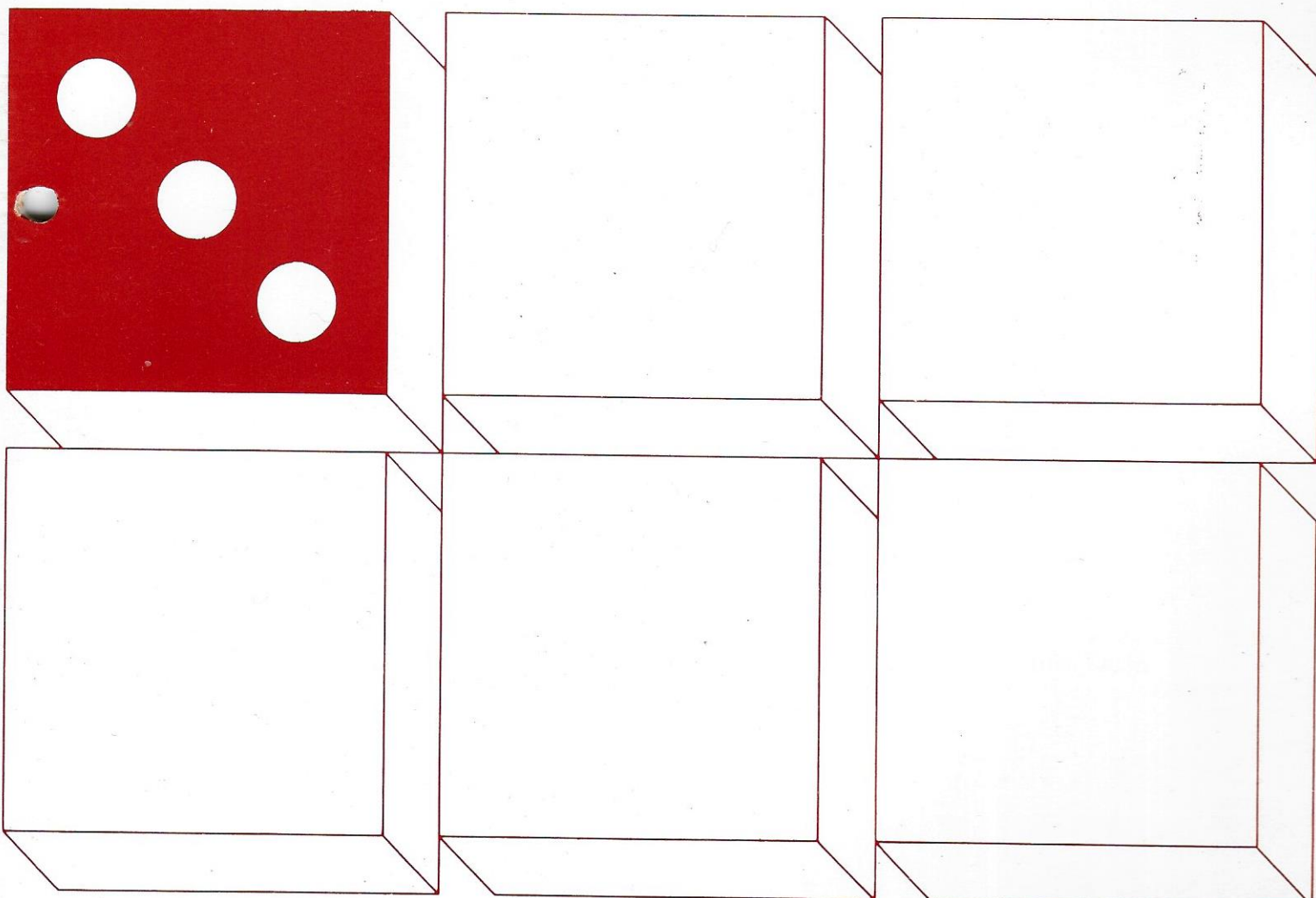
PATTERNS

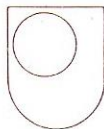




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Block I · Beginnings
Unit 3

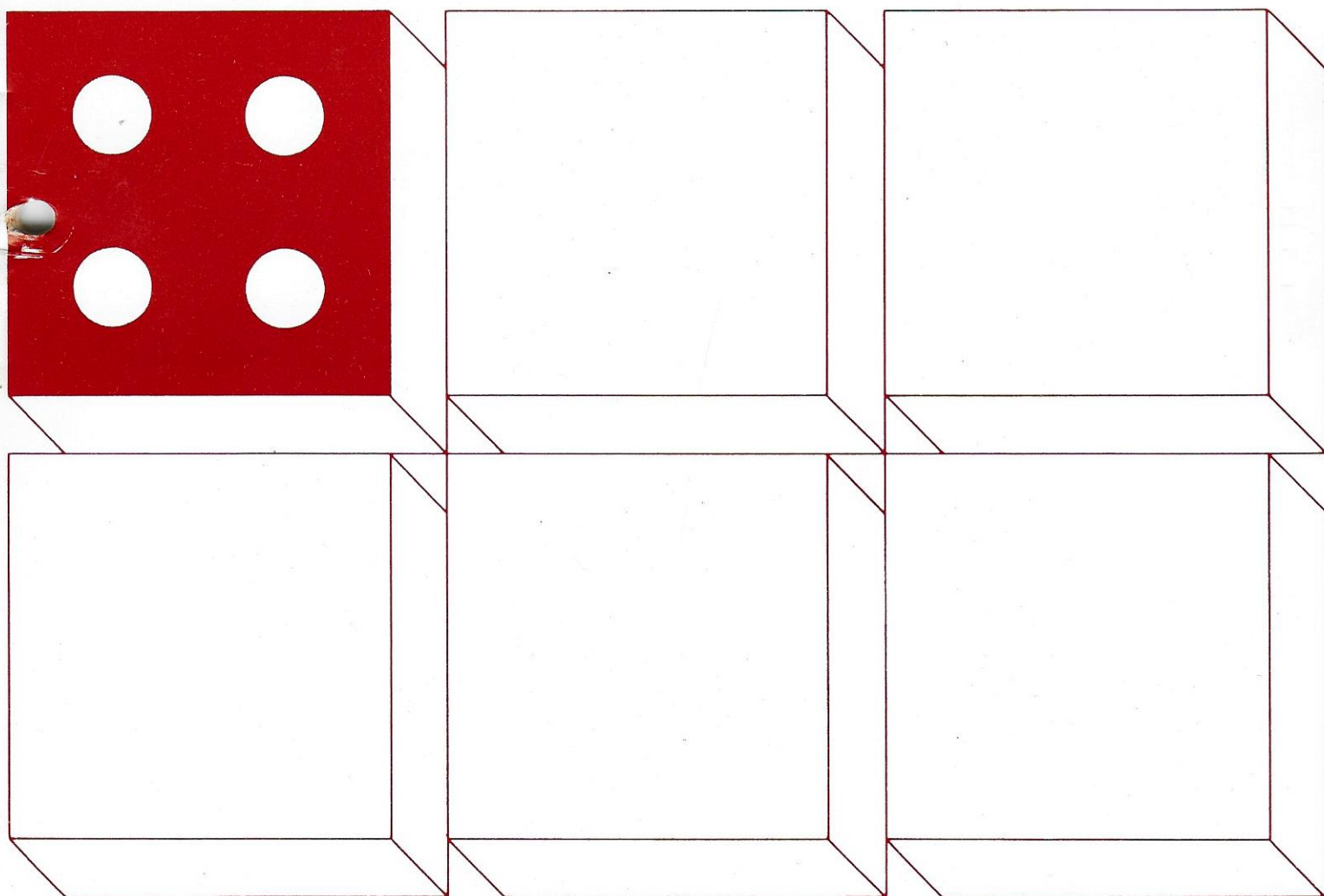
TRANSFORMATIONS AND TRIGONOMETRY

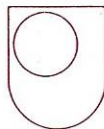




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Block I Beginnings
Unit 4

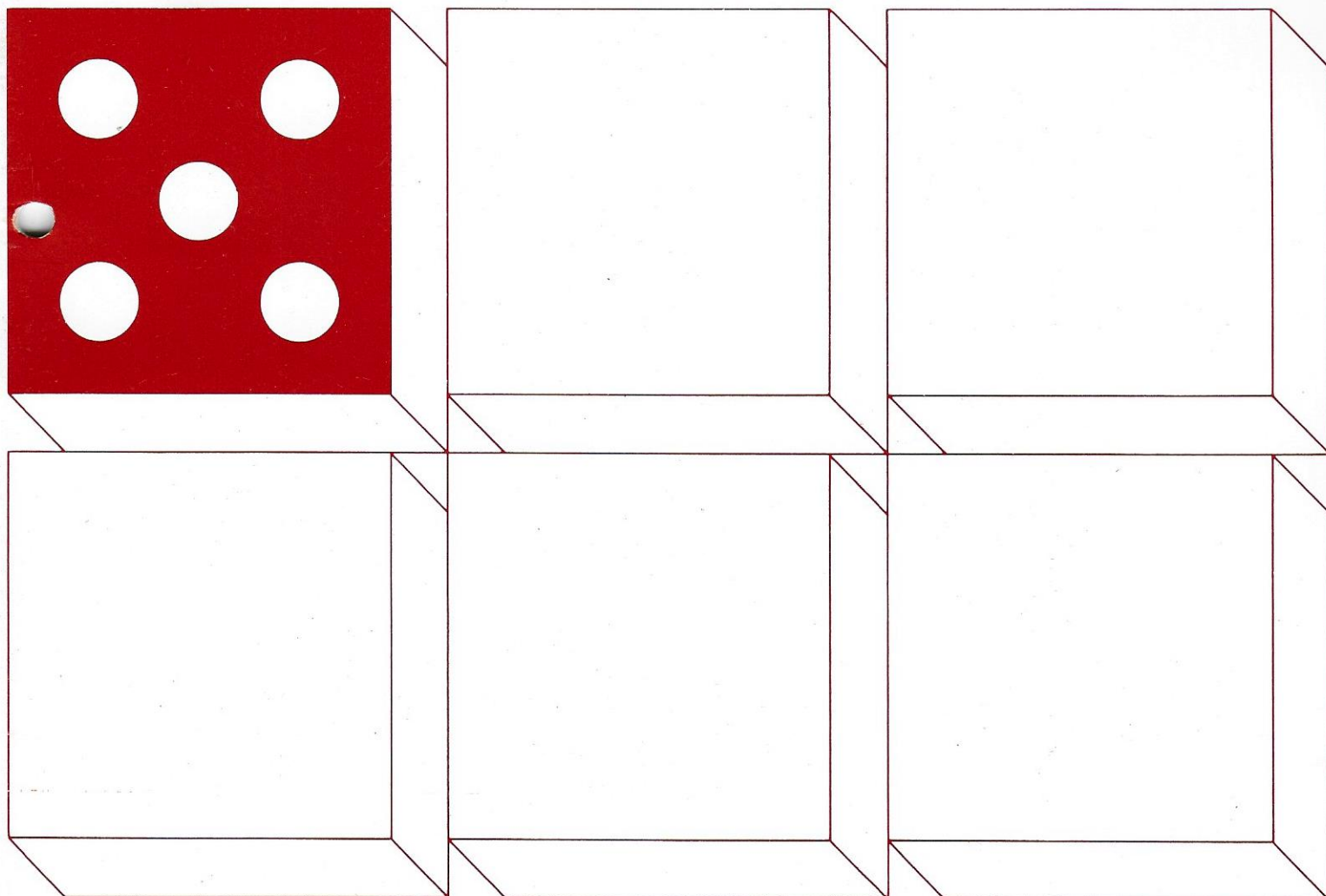
FUNCTIONS





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Unit 5

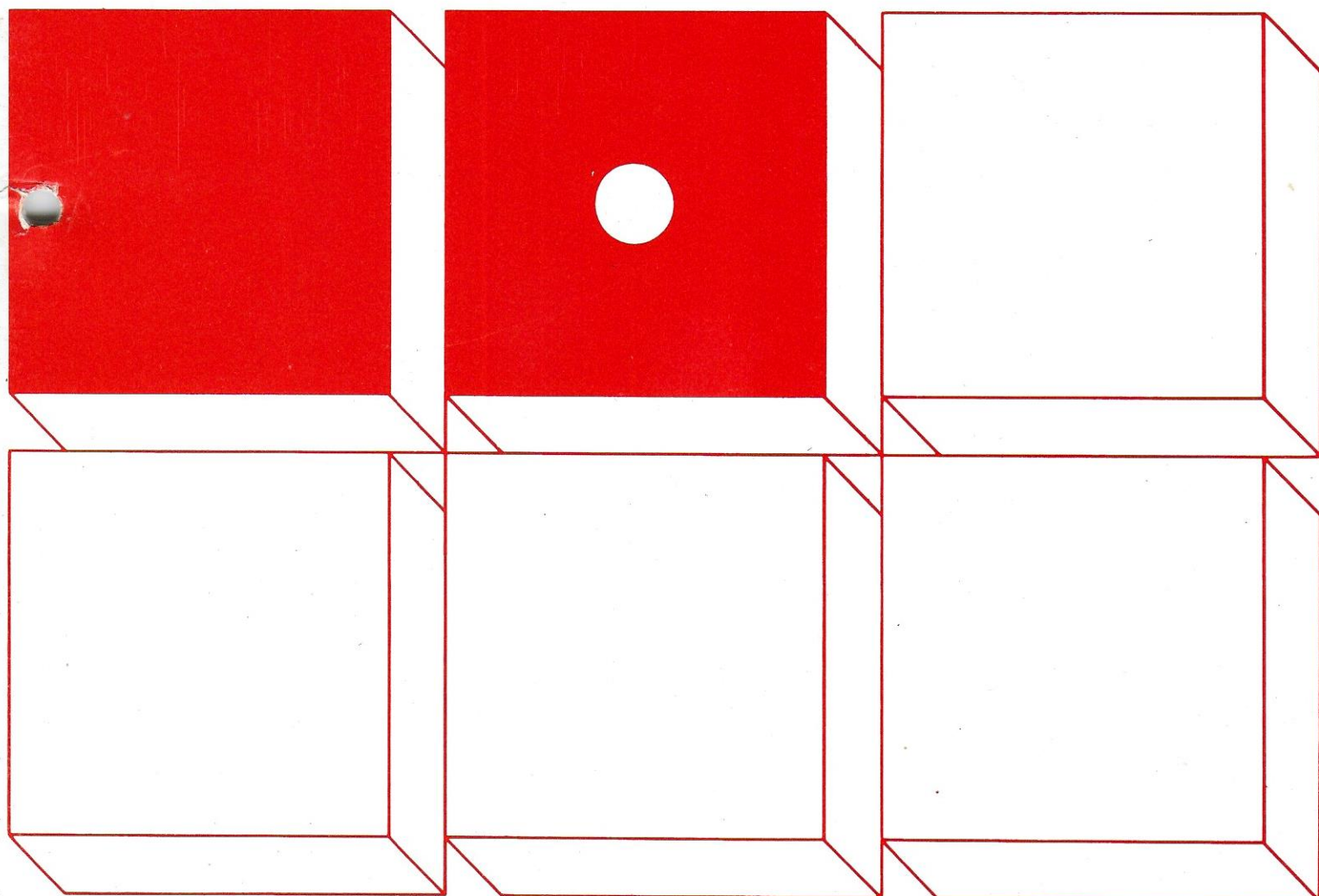
REVIEW





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Block II Functions and Numbers
Unit 1

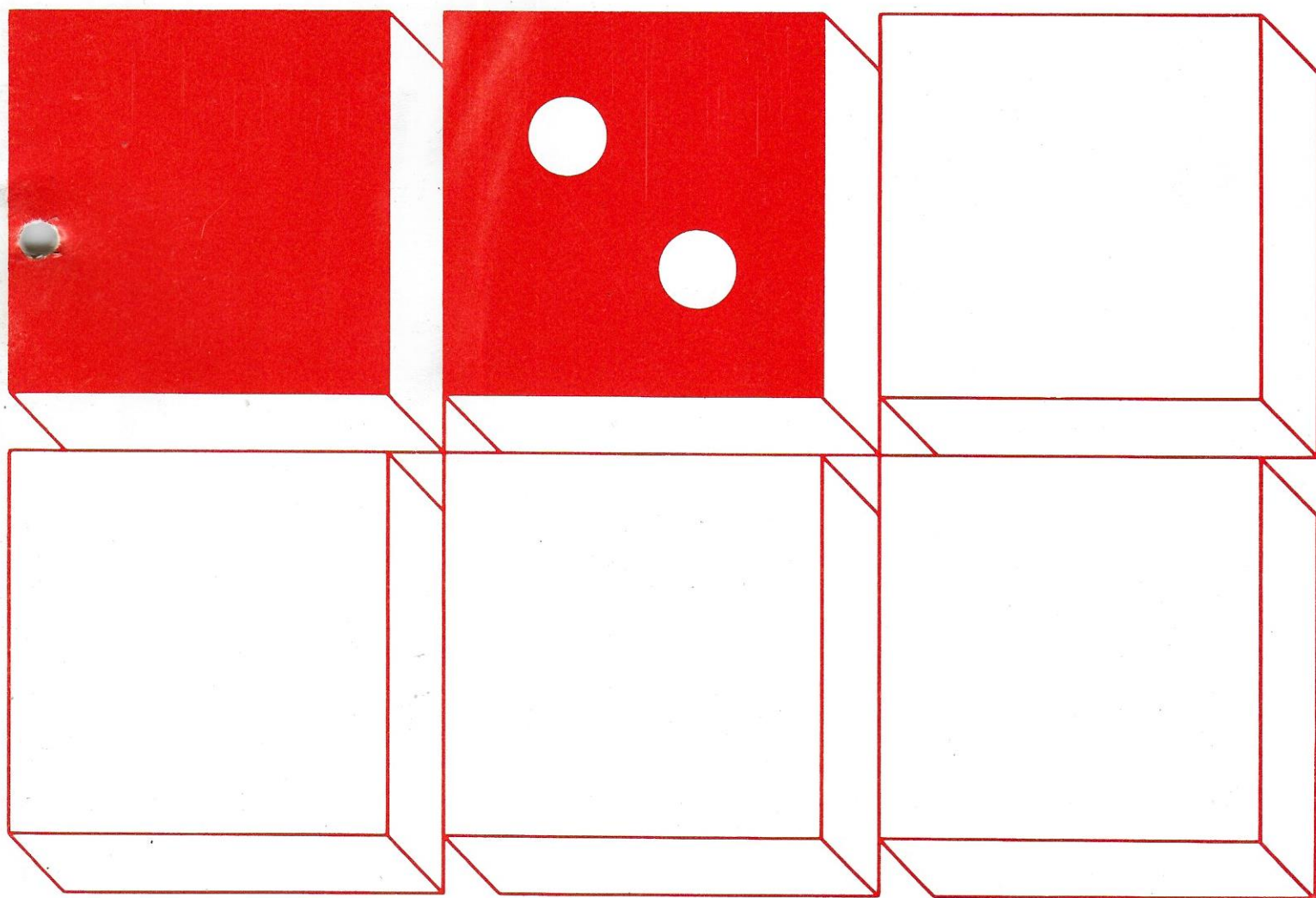
FUNCTIONS AND GRAPHS





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Block II Functions and Numbers
Unit 2

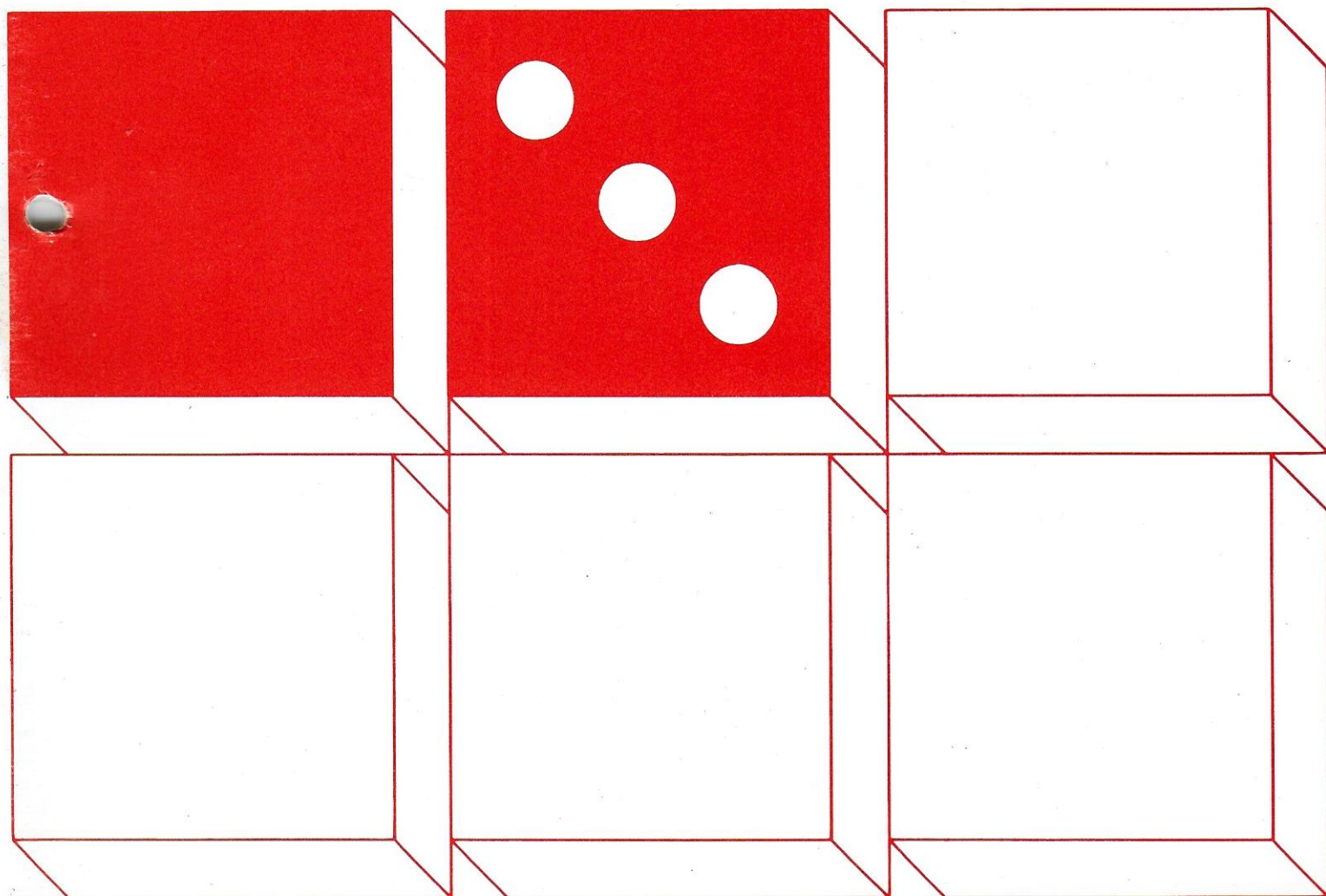
FUNCTIONS AND INEQUALITIES





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Block II Functions and Numbers
Unit 3

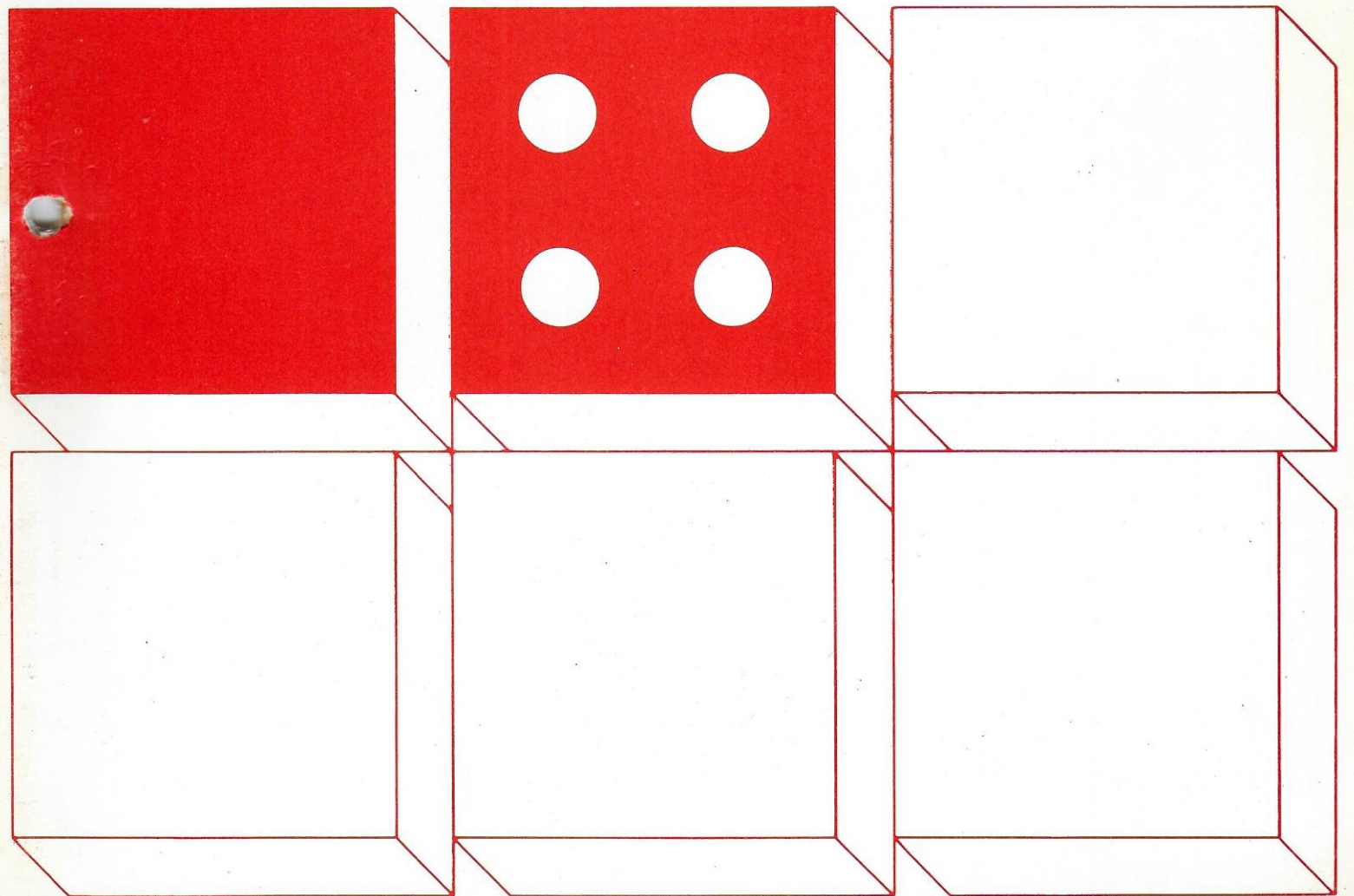
FUNCTIONS AND DATA





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Block II Functions and Numbers
Unit 4

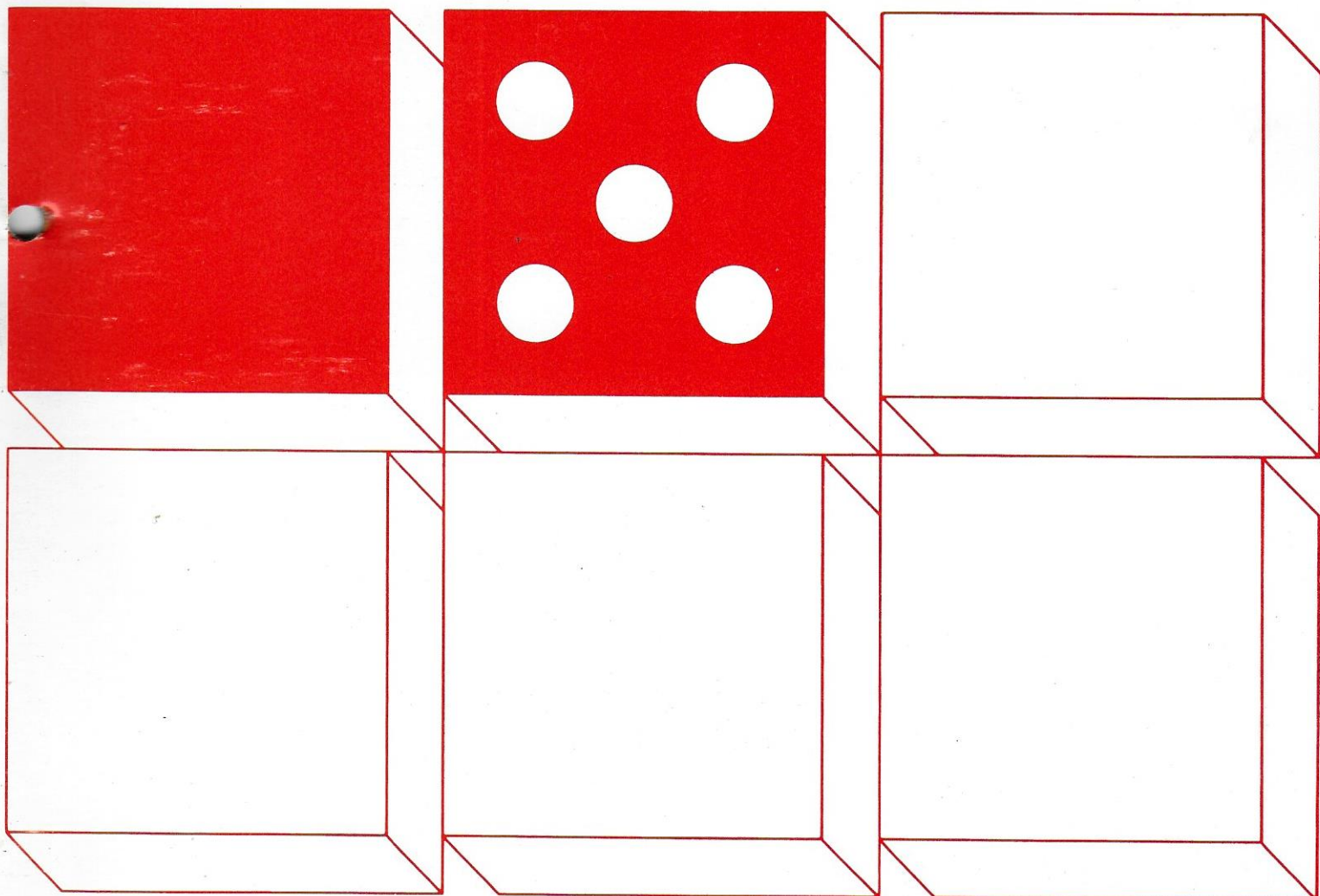
FUNCTIONS AND LIMITS





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Unit 5

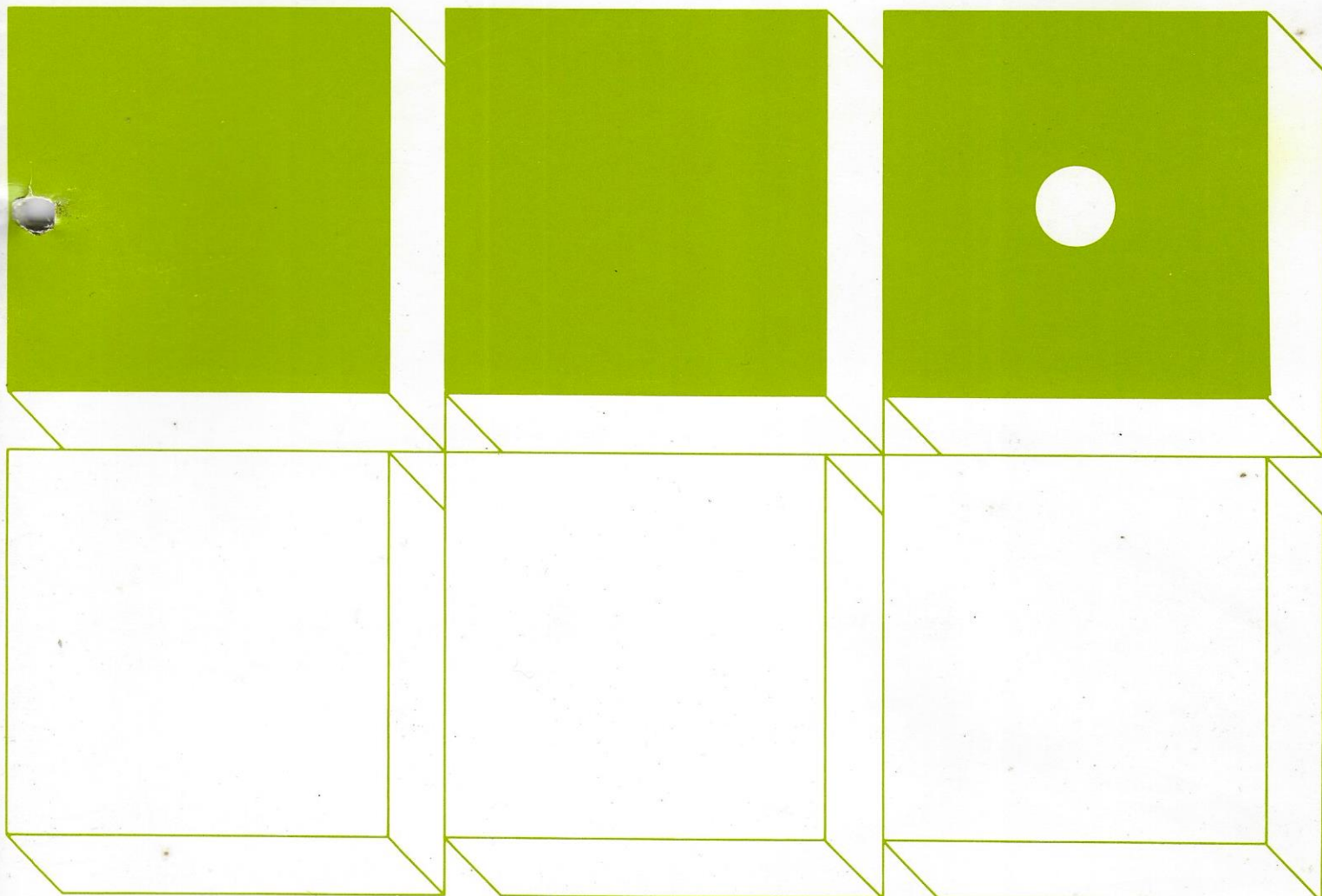
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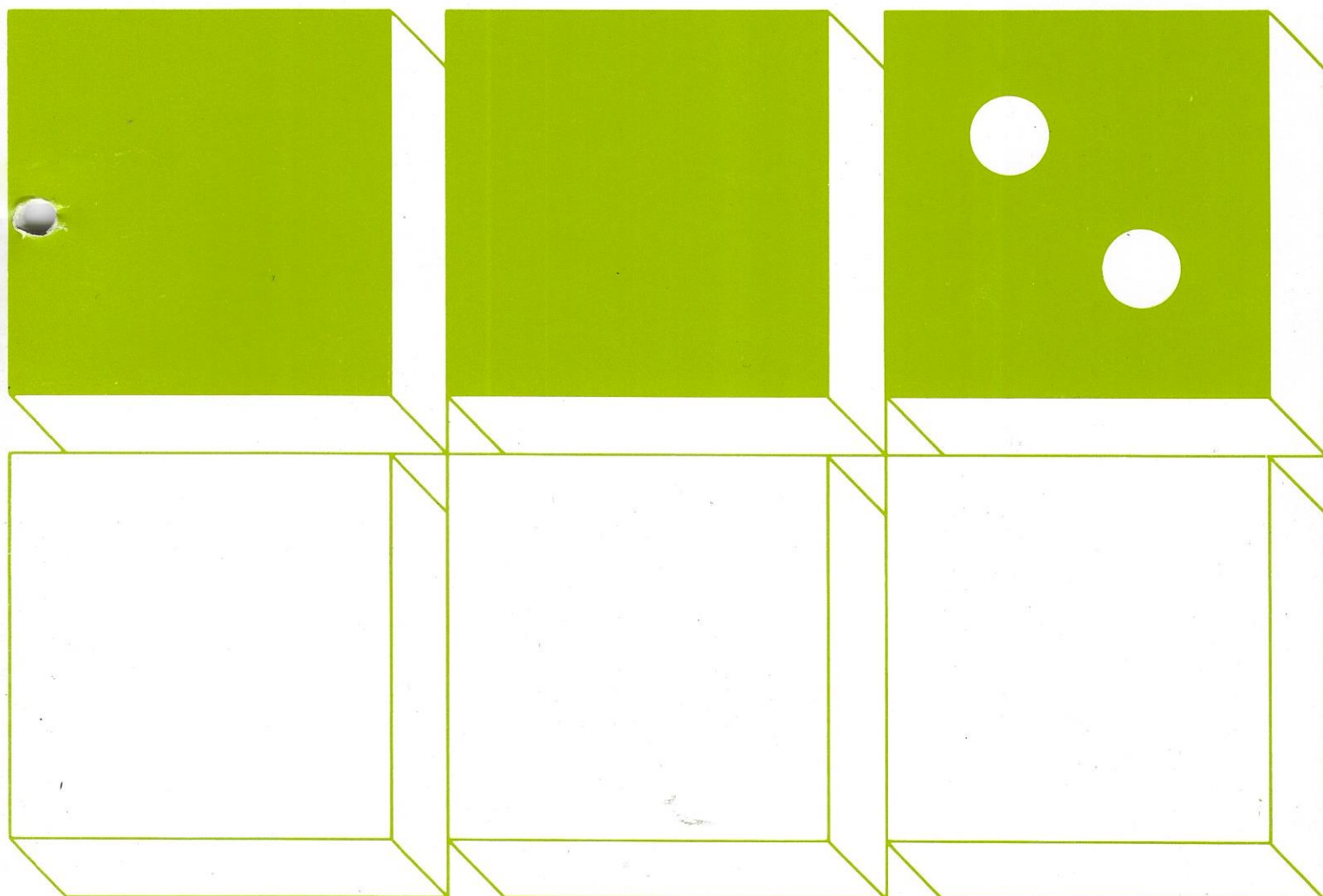
DIFFERENTIATION I





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Block III Calculus
Unit 2

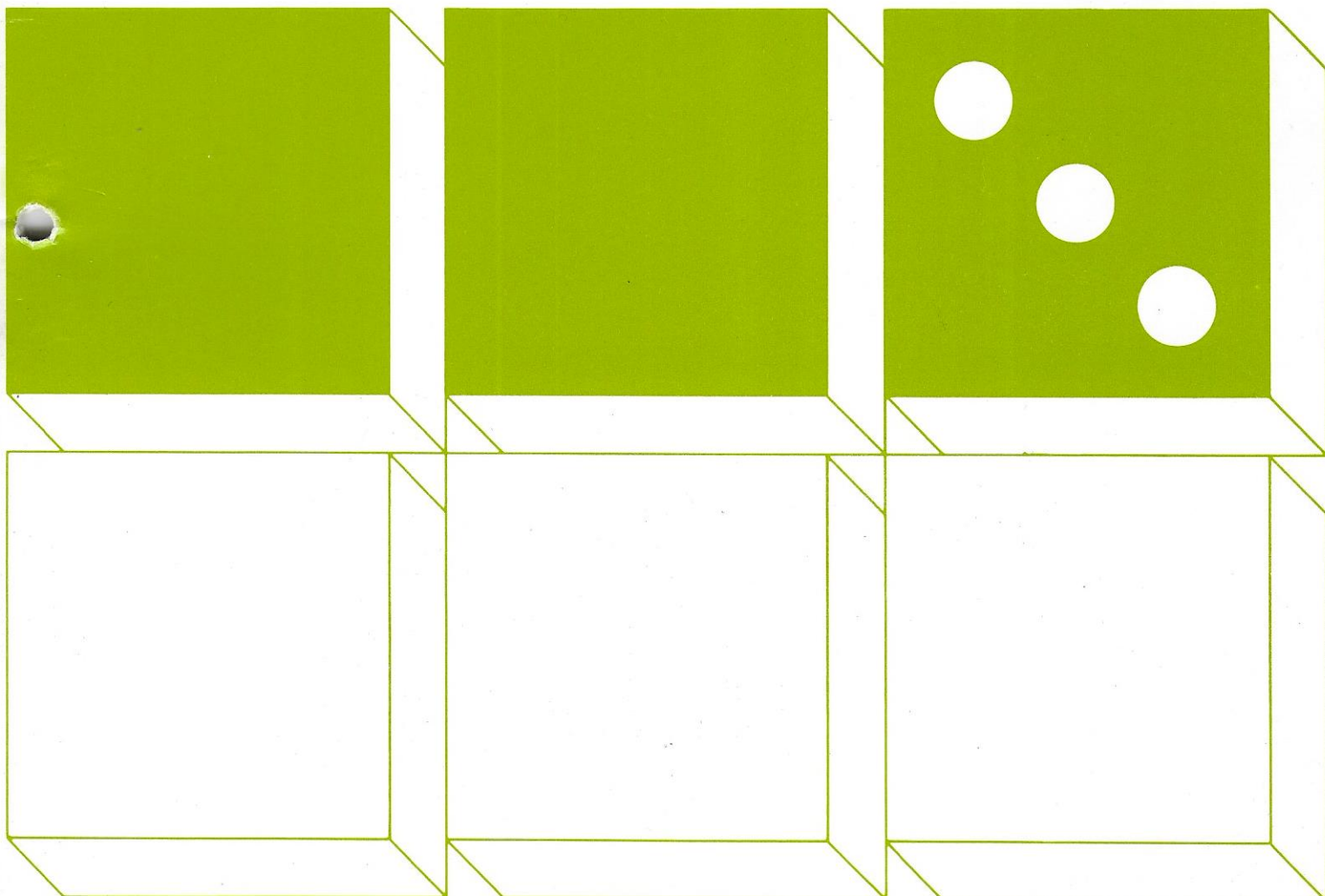
DIFFERENTIATION II





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Block III Calculus
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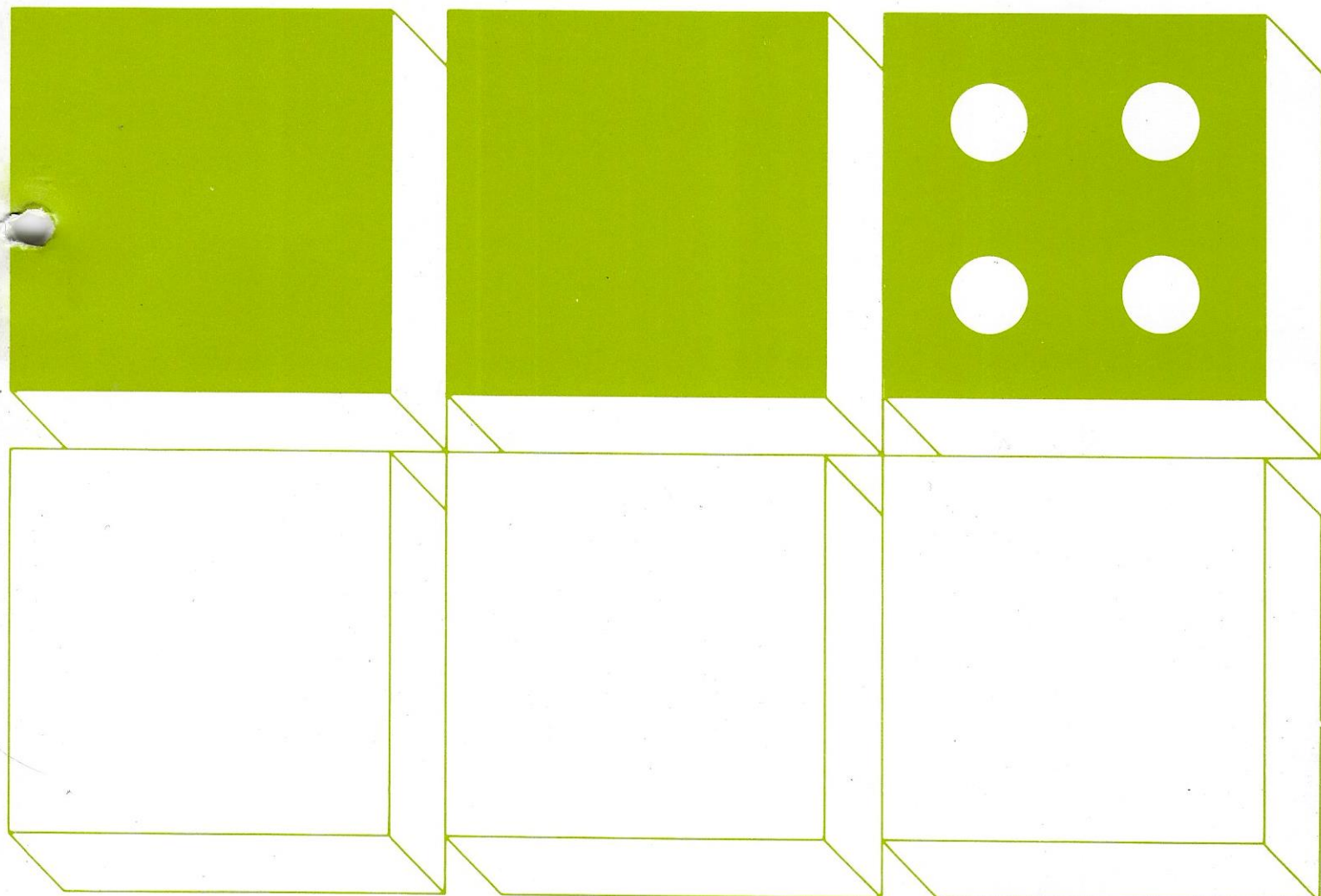
INTEGRATION I





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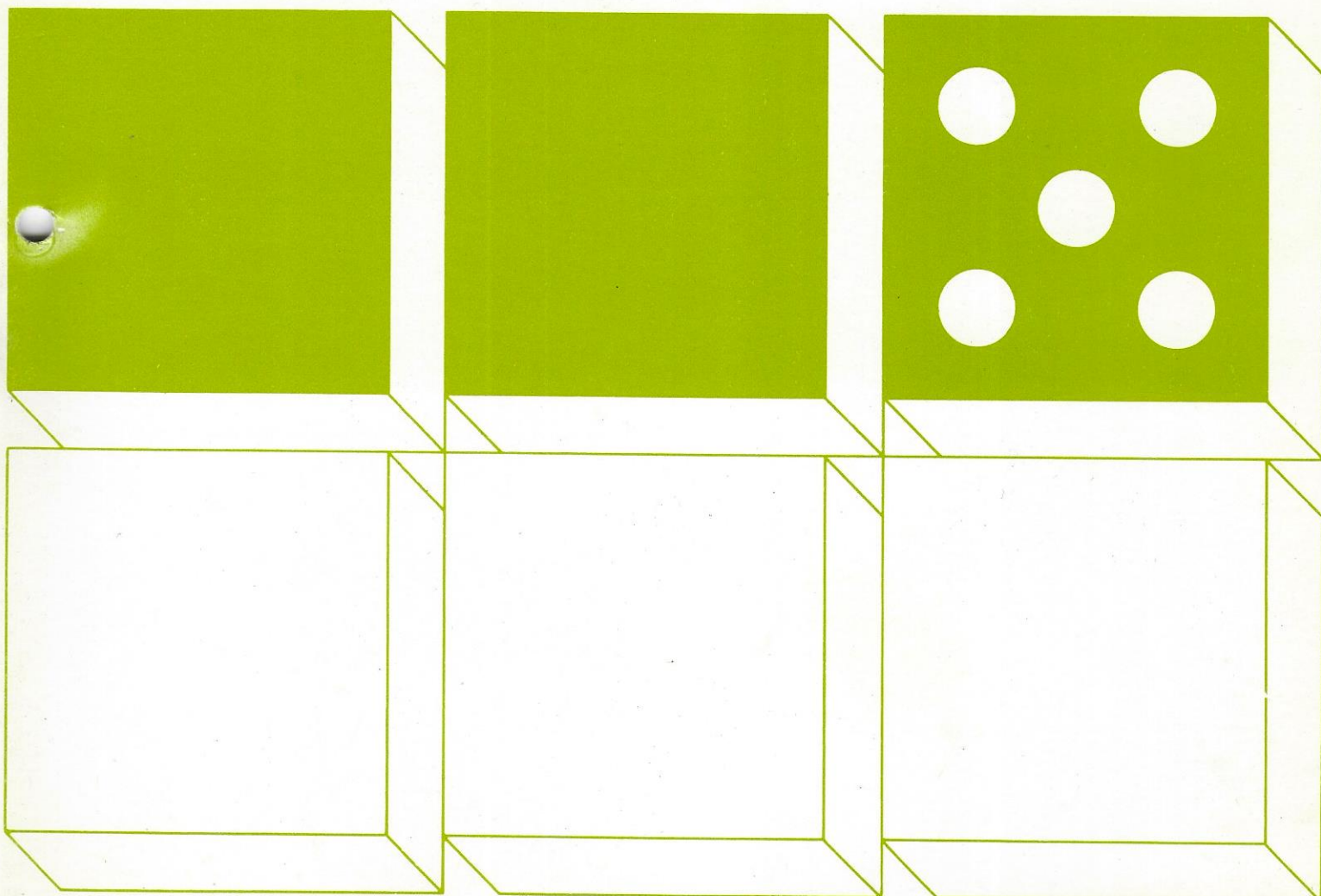
INTEGRATION II





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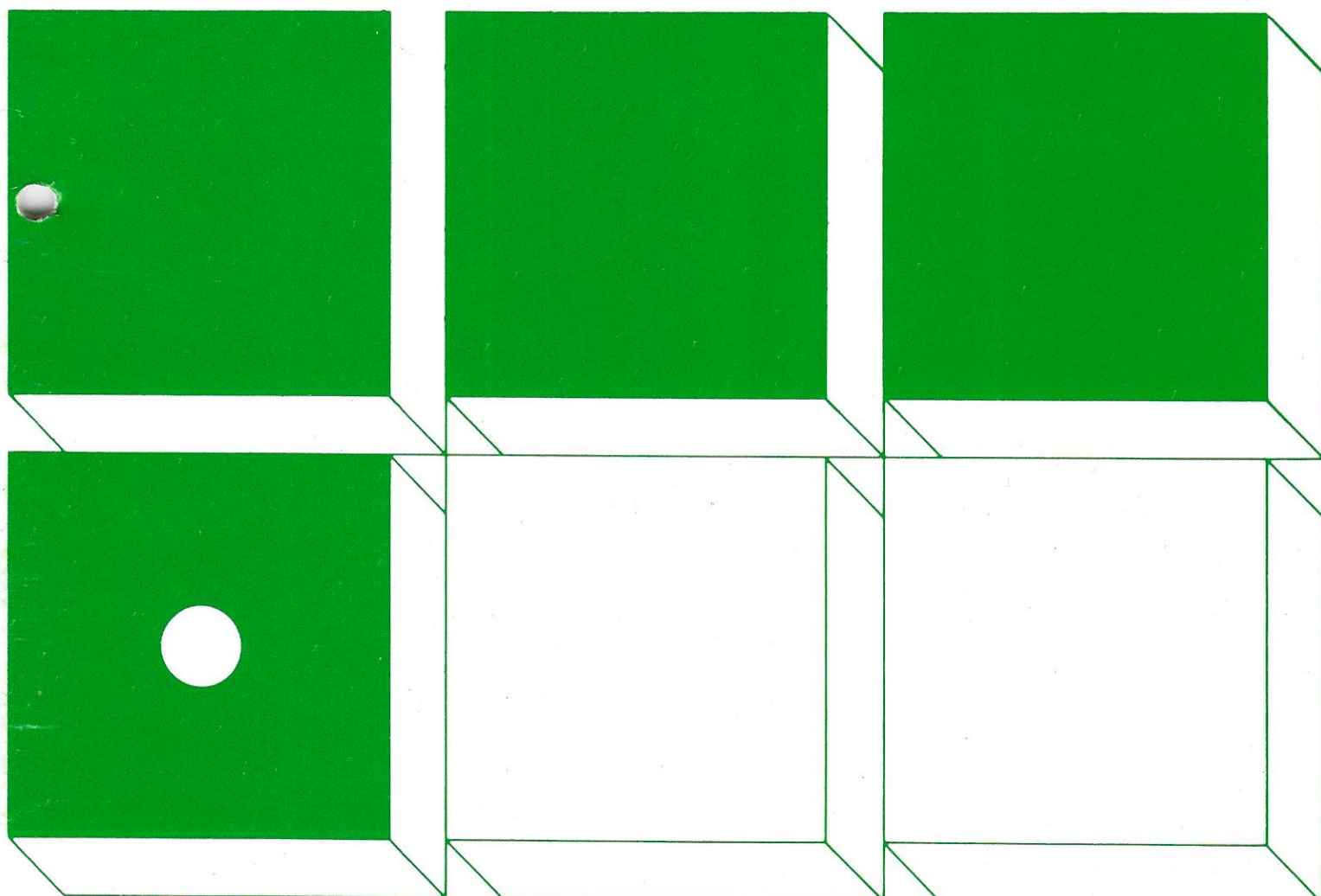
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Block IV Matrices
Unit 1

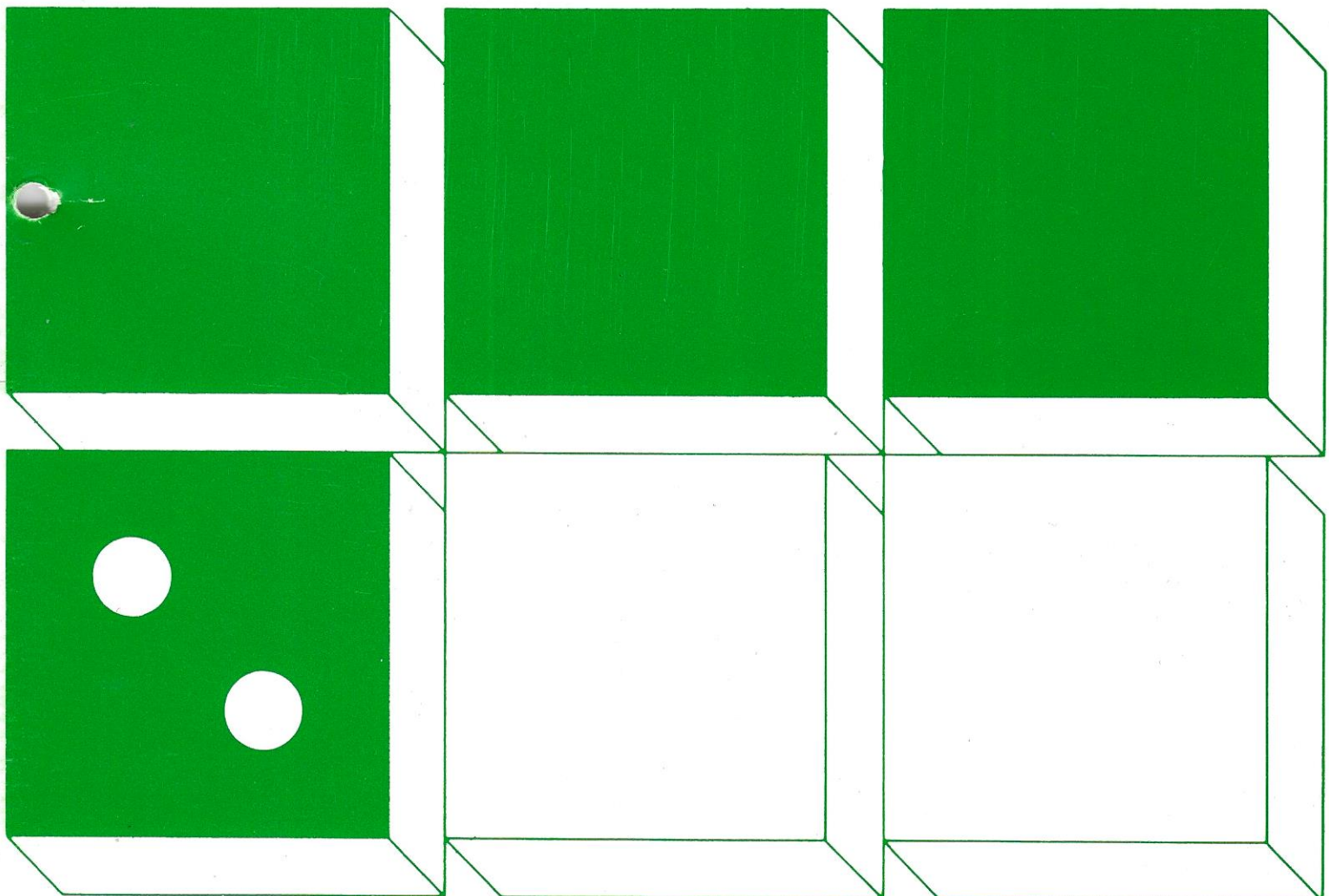
MATRICES AND NETWORKS





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Block IV Matrices
Unit 2

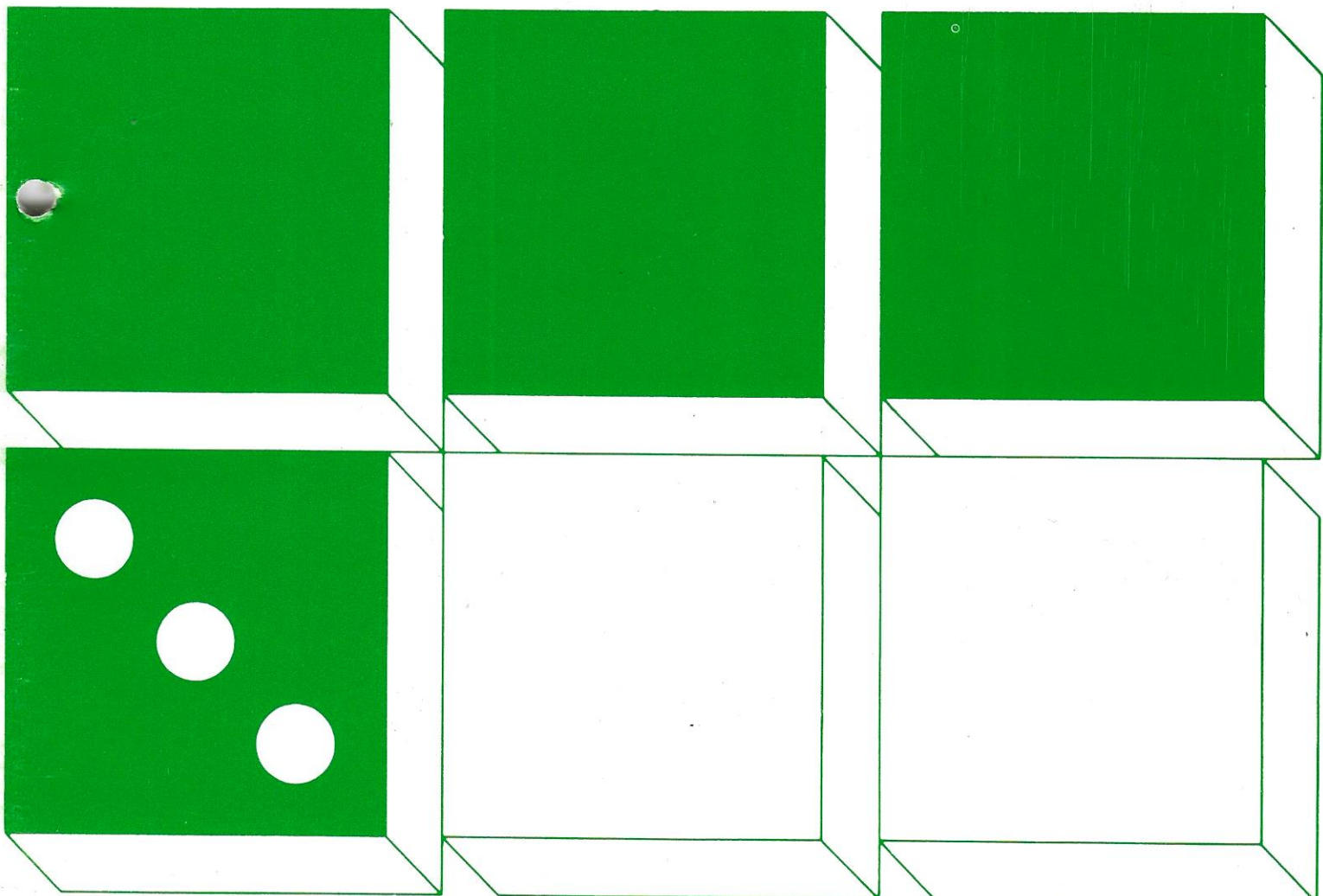
MATRICES AND TRANSFORMATIONS





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Unit 3

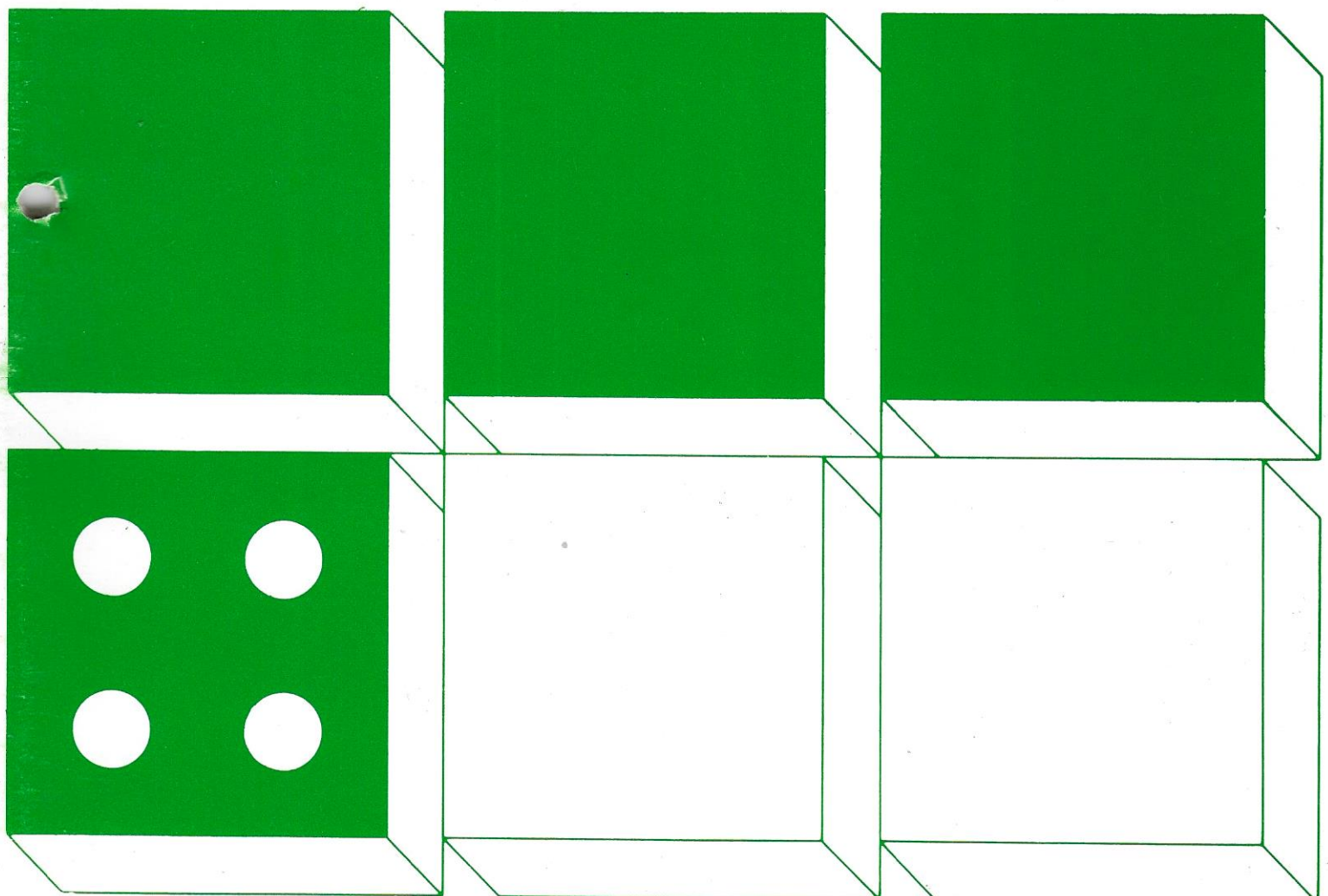
CONICS AND MATRIX ALGEBRA

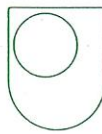




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Block IV Matrices
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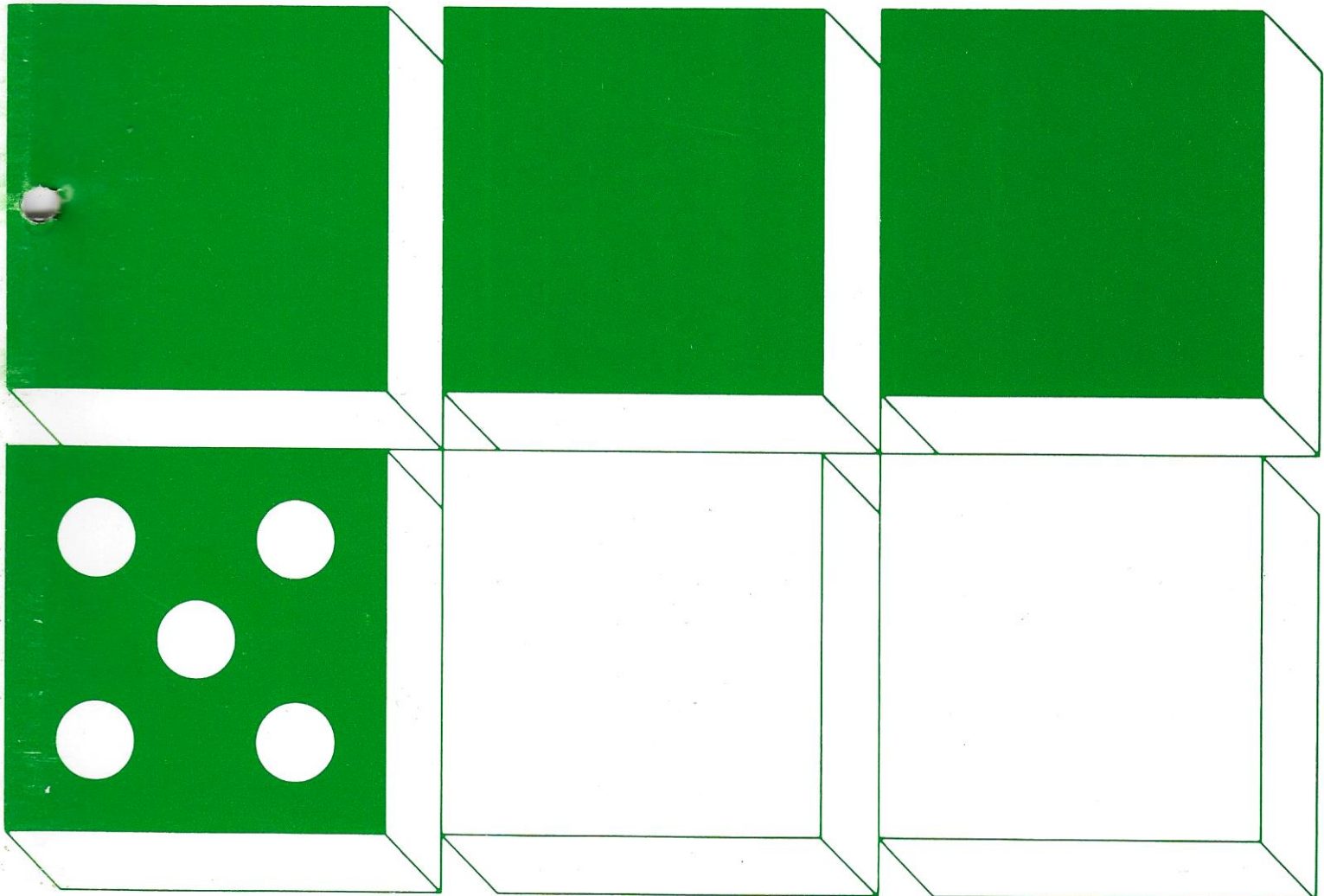
MATRIX POWER





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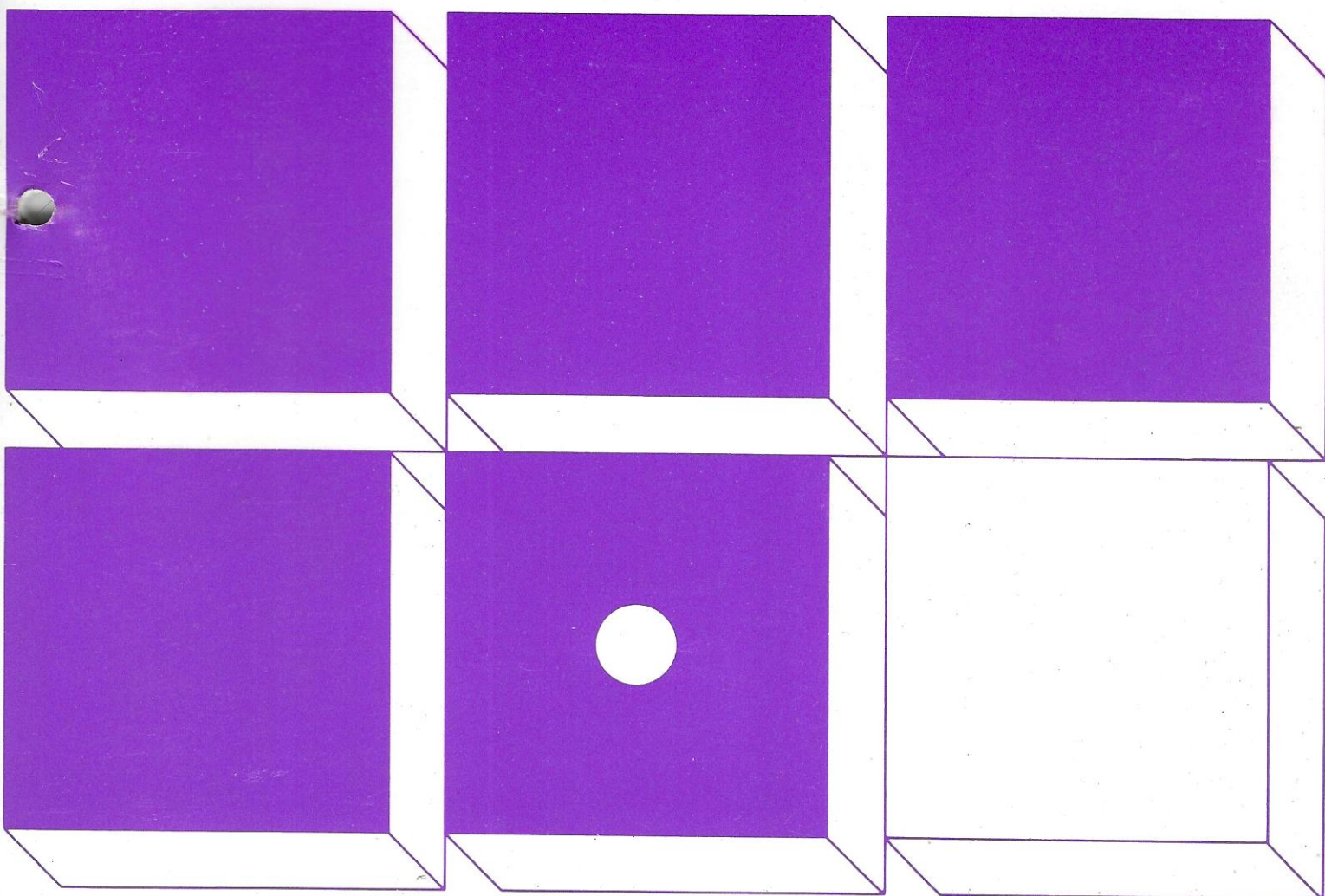
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Unit 1

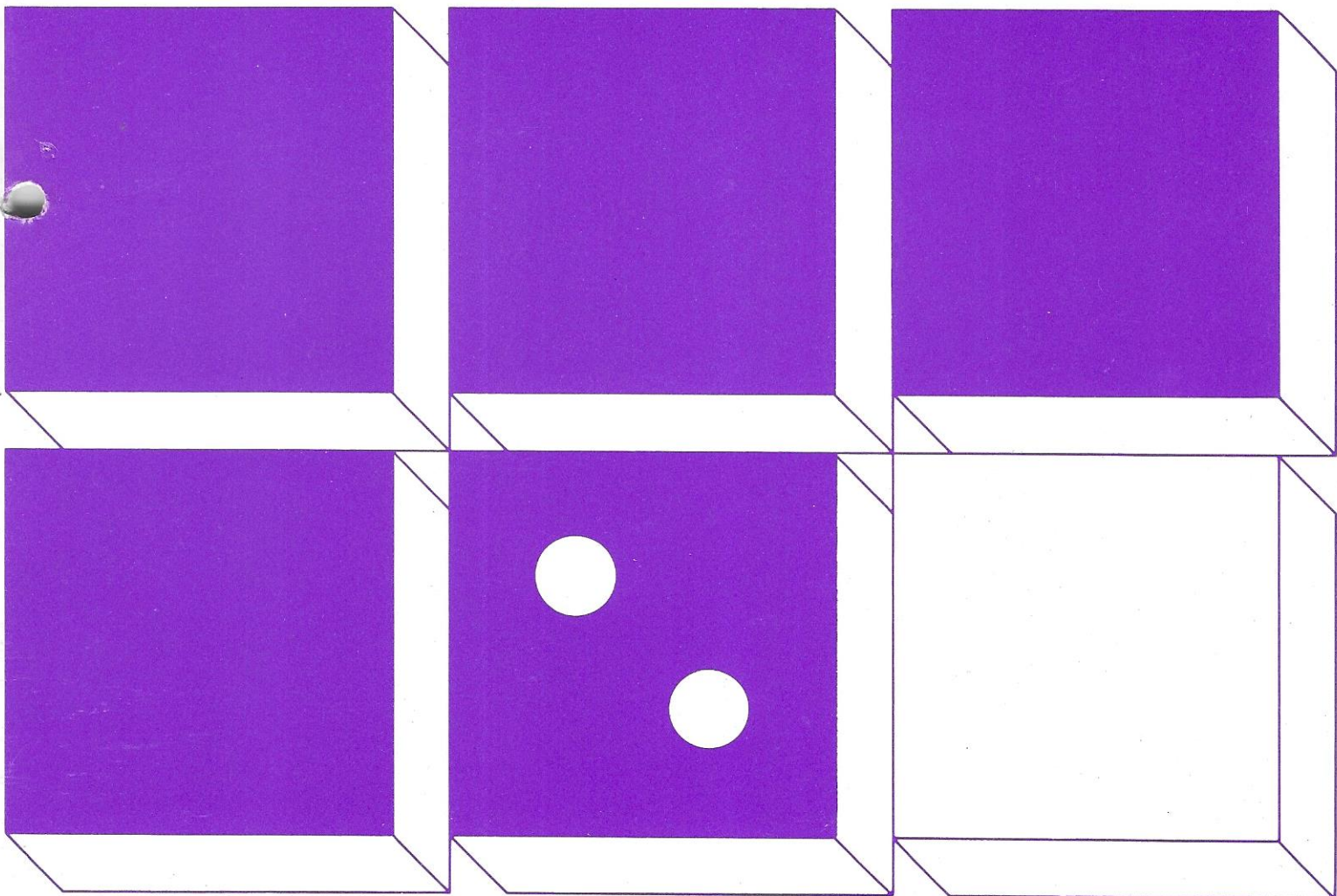
RELATIONS FROM DATA





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Unit 2

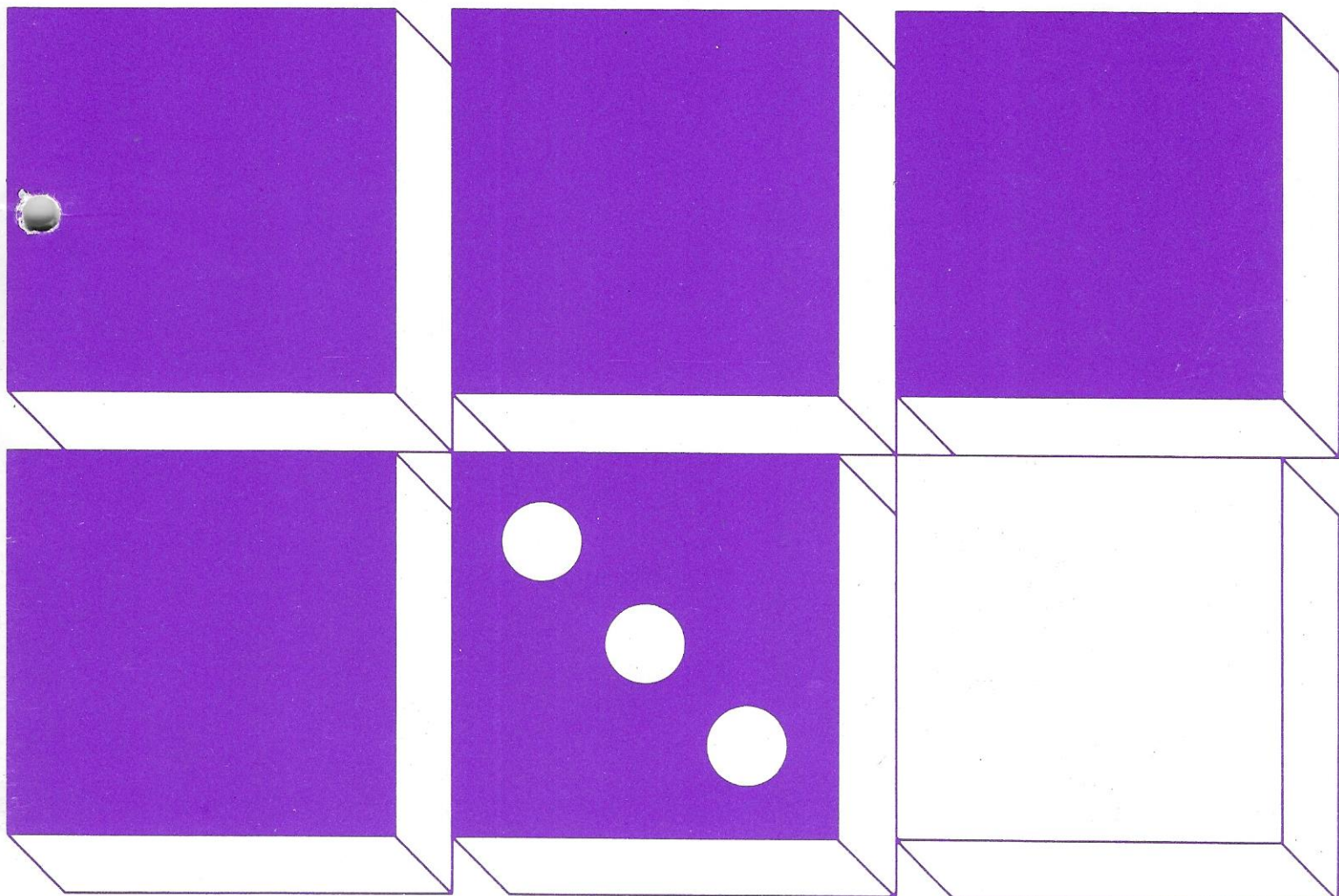
RELATIONS FROM REASONING





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Unit 3

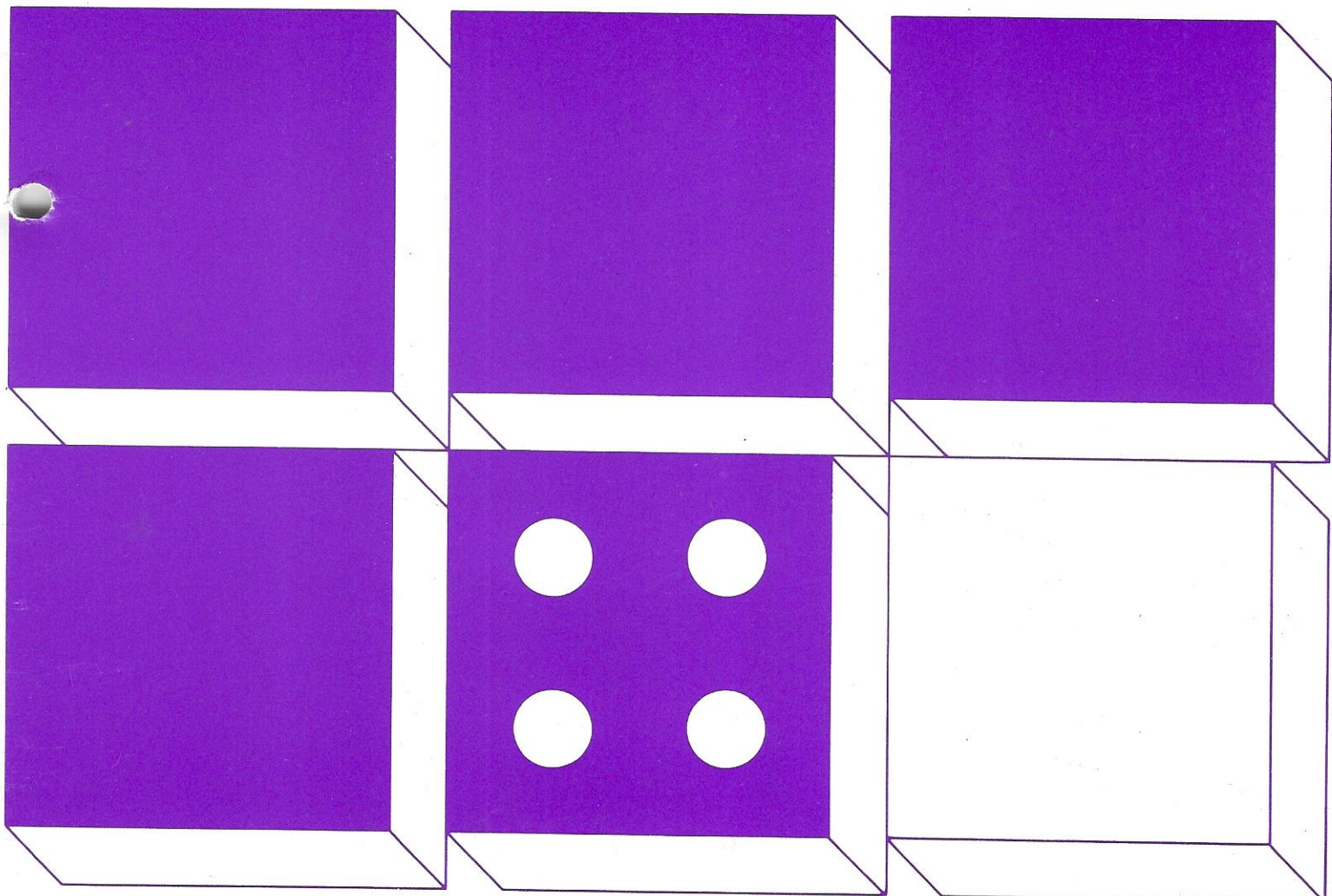
DIFFERENTIAL EQUATIONS





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Block V Mathematical Modelling
Unit 4

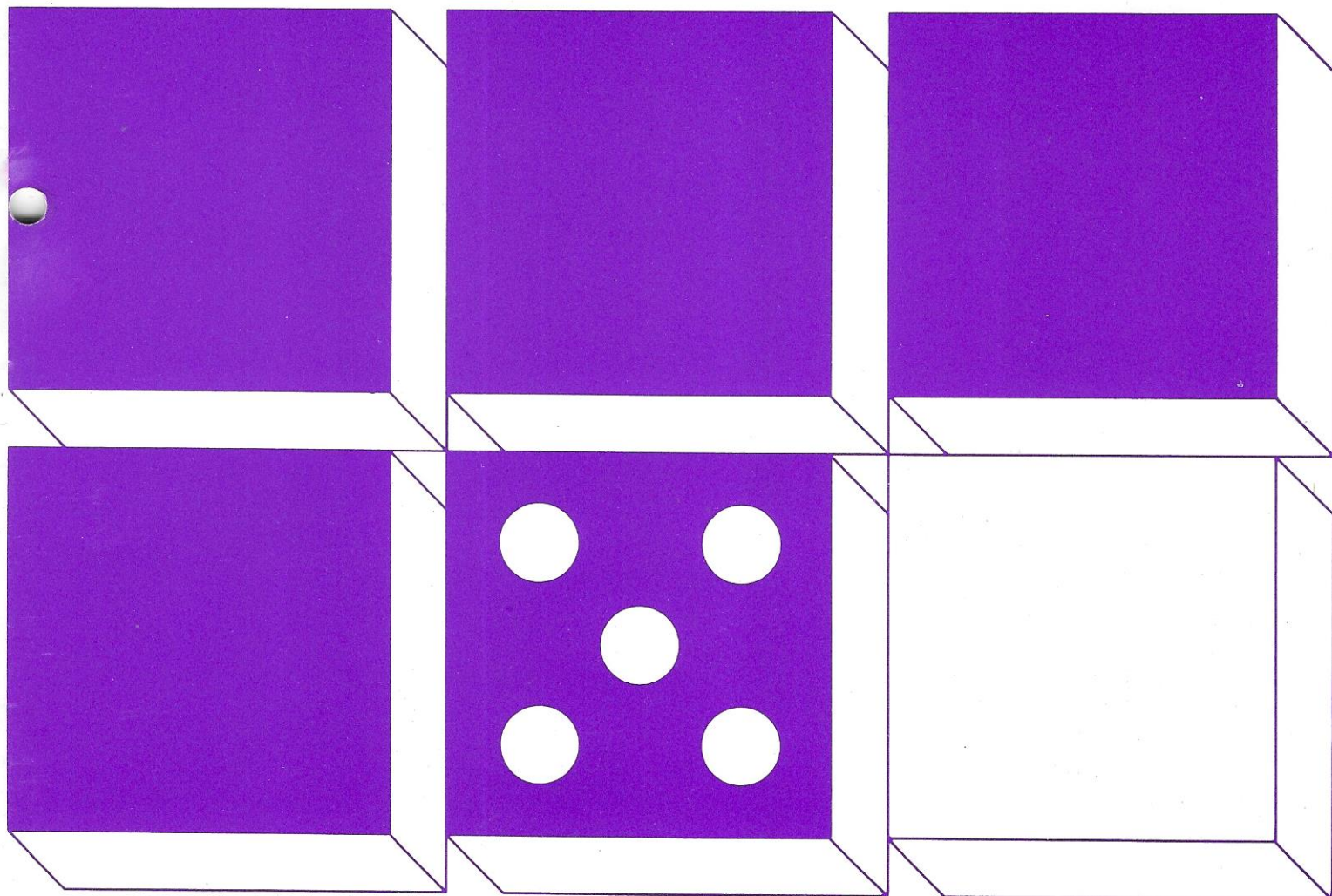
VECTORS AND APPLICATIONS





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Unit 5

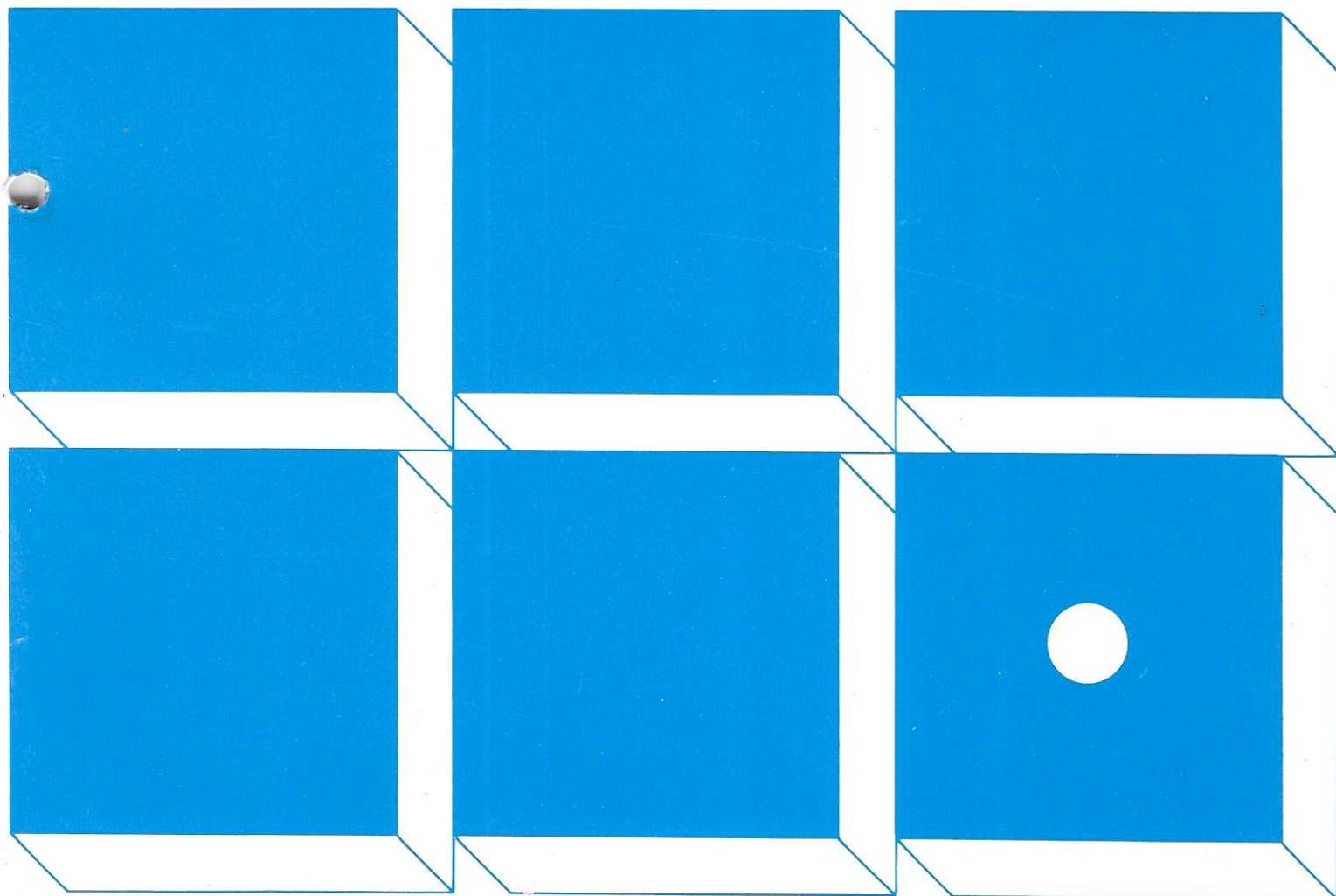
REVIEW





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Block VI Mathematical Structures
Unit 1

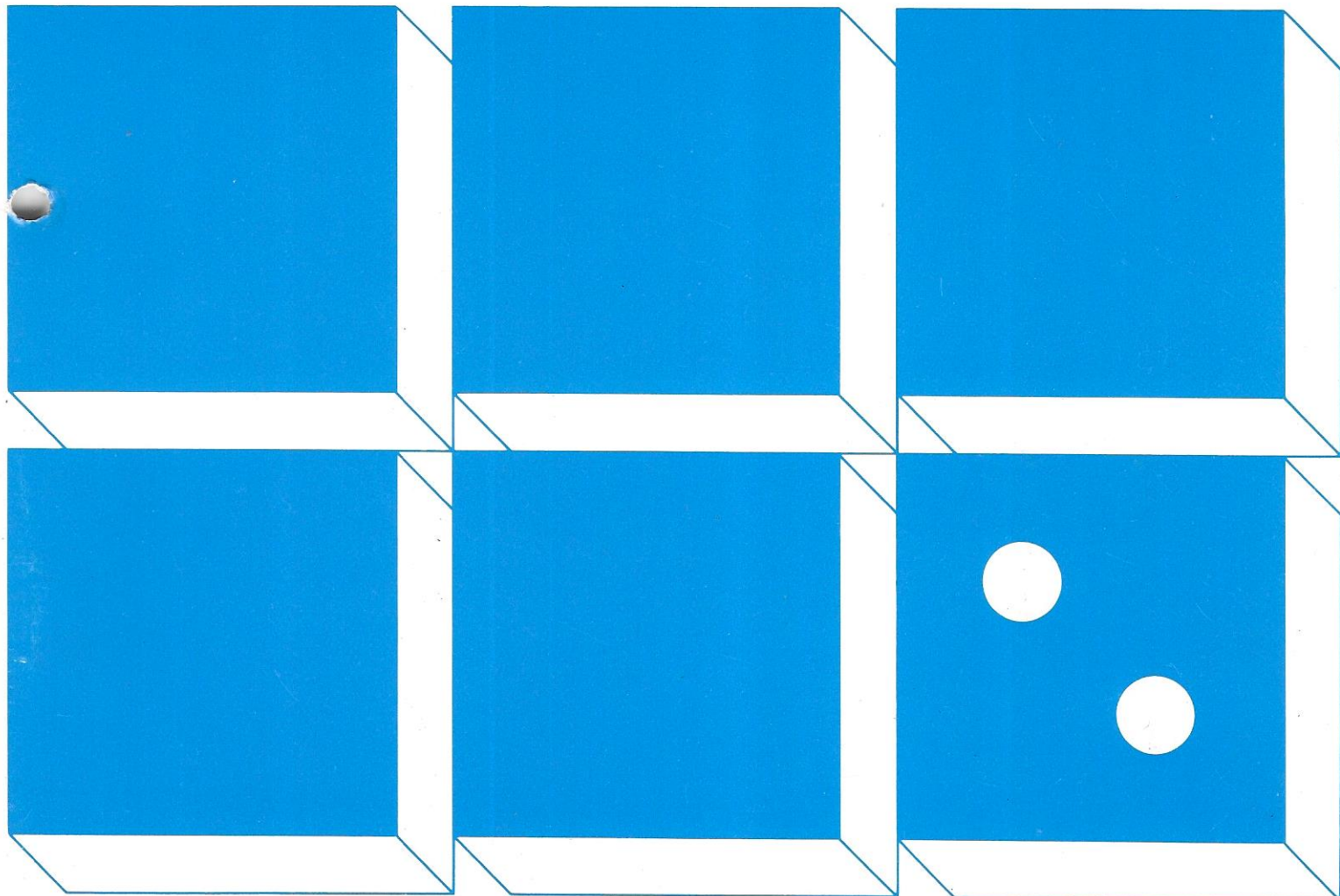
COMPLEX NUMBERS





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Block VI Mathematical Structures
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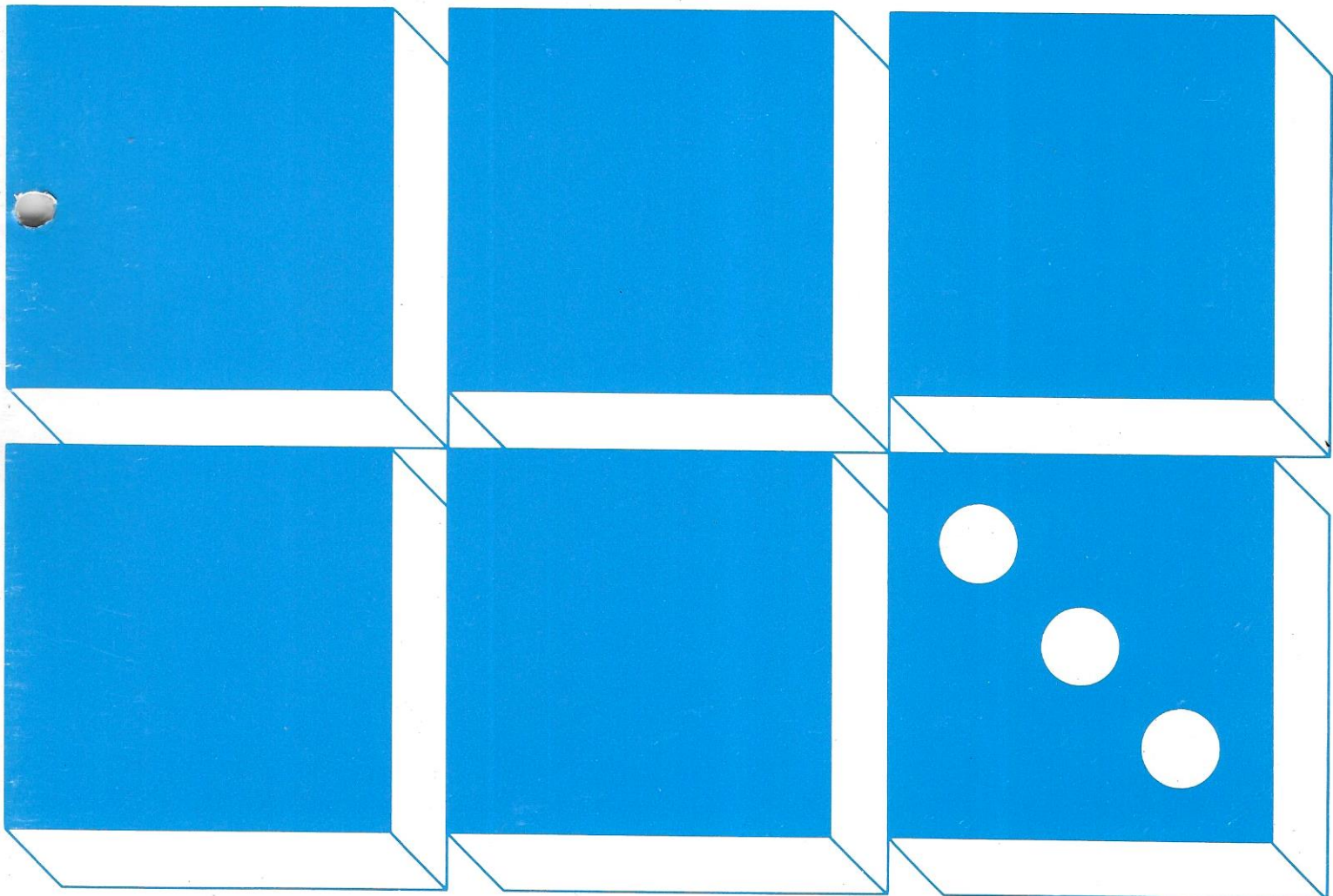
GROUPS





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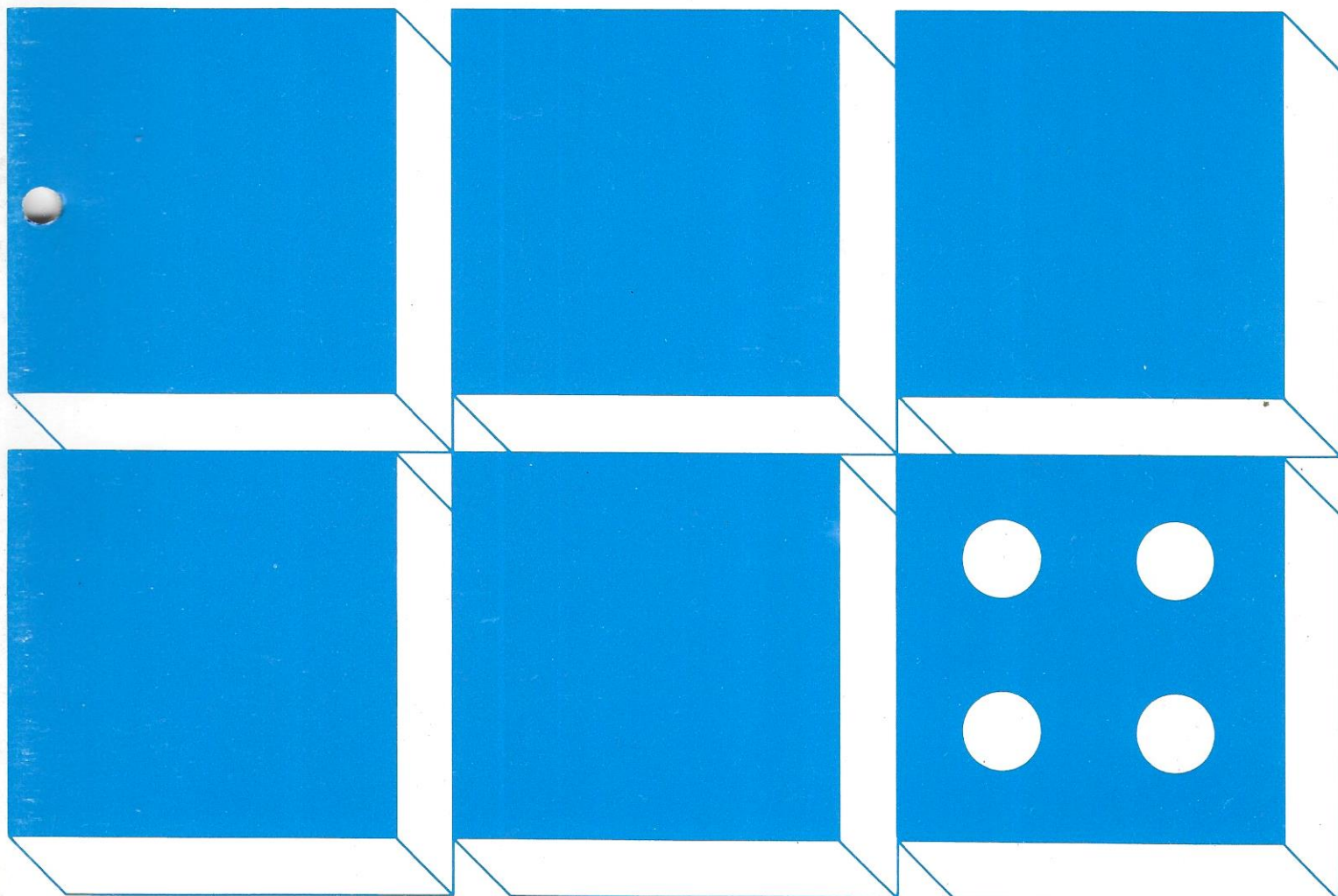
PROOF





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Unit 4

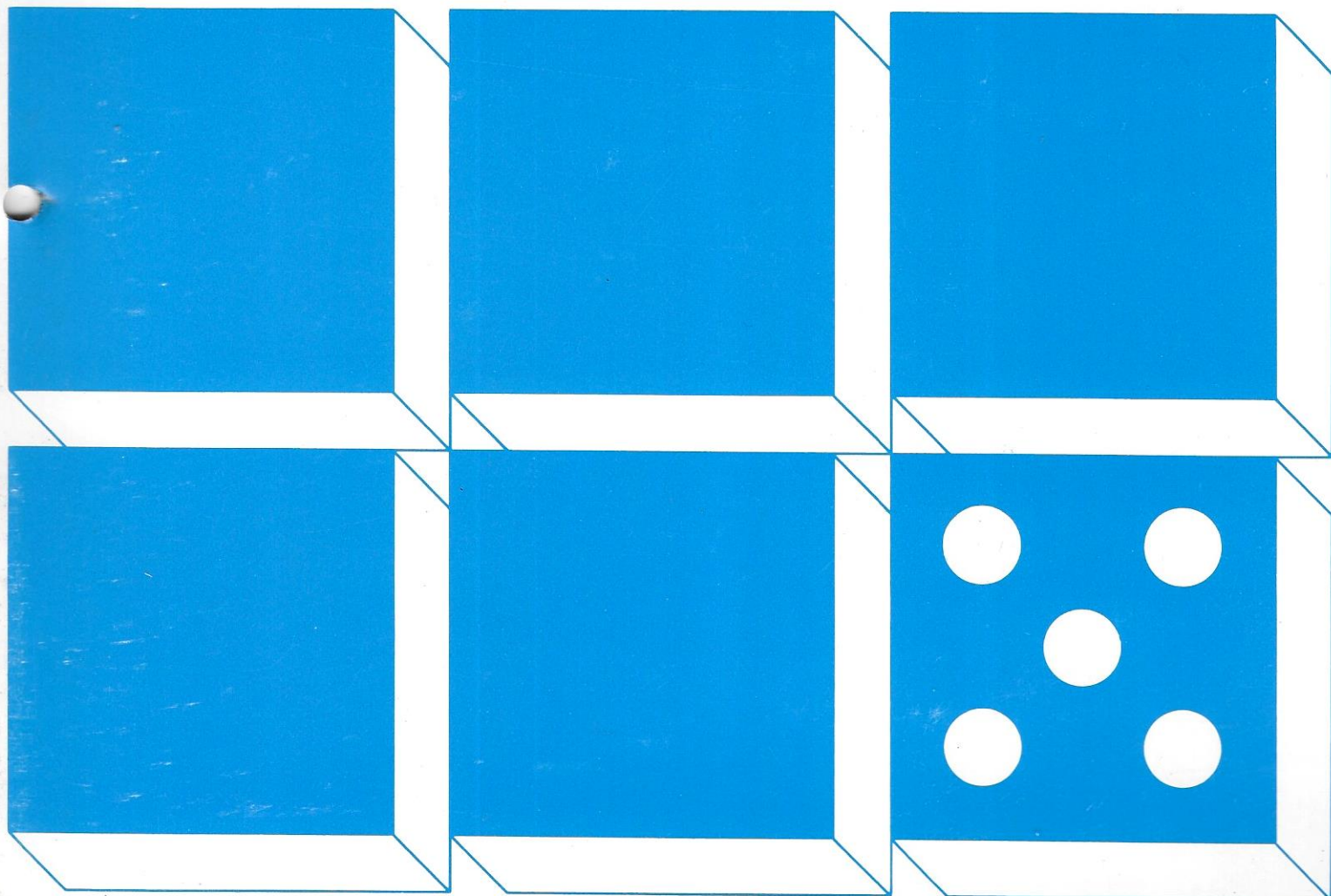
CLASSIFICATION





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Unit 5

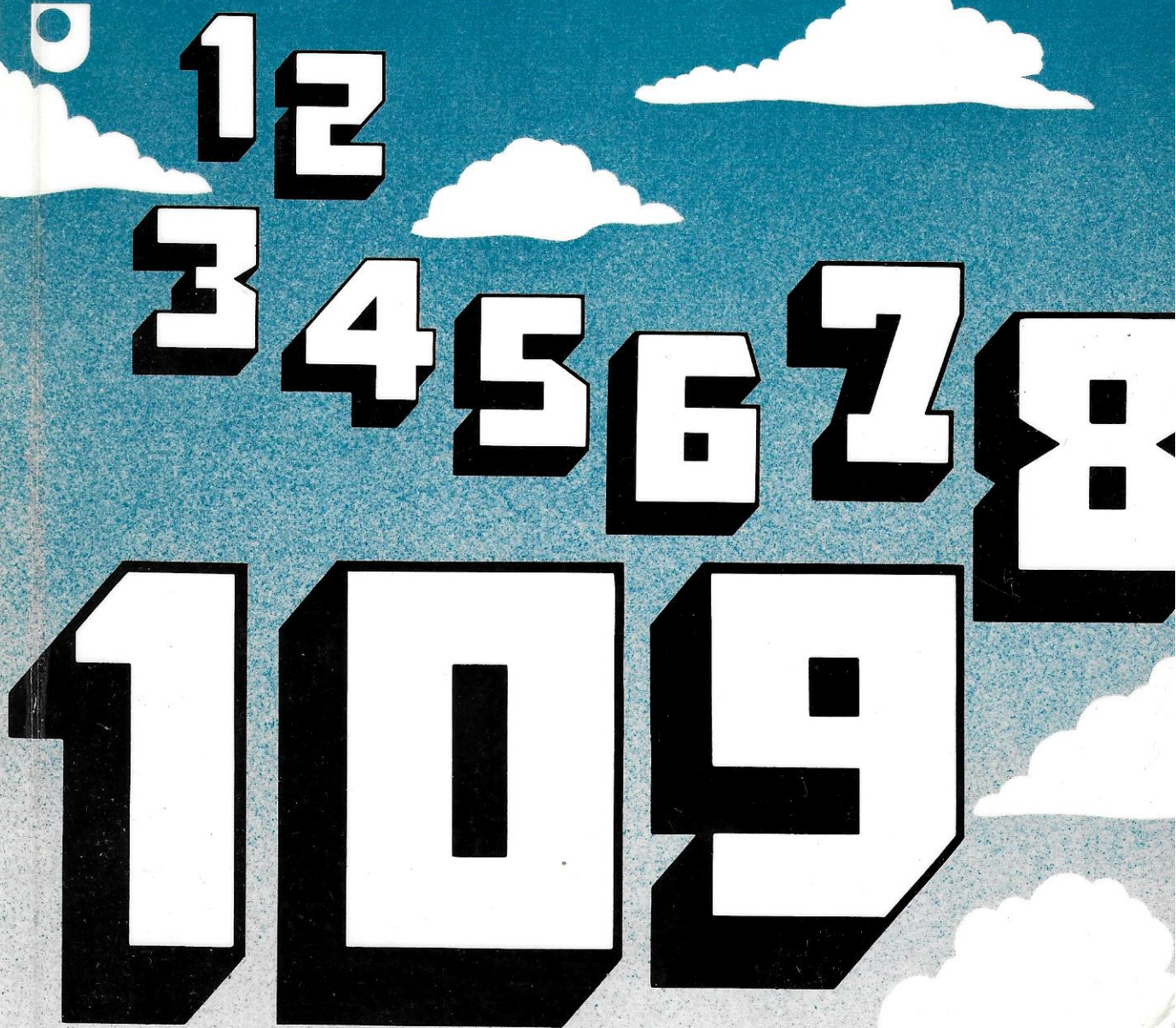
REVIEW



countdown to mathematics

Lynne Graham & David Sargent
of the Open University

Volume 1



Countdown to Mathematics

Lynne Graham and David Sargent, Faculty of Mathematics, The Open University.

Countdown to Mathematics has been written primarily for students who intend to take an Open University course which involves the use of some elementary mathematics. As such, its purpose is to help the home-based student revise and practise basic skills in arithmetic, algebra, geometry, graphs, and trigonometry. Although it arises from the needs of Open University courses and is designed for self-study, the core material it contains will also be valuable in classroom-based school and college courses of a similar mathematical level.

Countdown to Mathematics features the use of the pocket calculator as an integral teaching aid; it is used to explore mathematical properties as well as speed up calculations.

There is a wide spectrum of course needs, ranging from the basic numeracy assumed in many social science courses to the very specific skills required for mathematics and science courses. Consequently, the nine teaching modules in Countdown to Mathematics have been split into two separate books.

VOLUME 1 consists of Modules 1–4 and concentrates on the basic mathematical skills assumed in social science courses. It deals with arithmetic, simple algebra, how to plot and read graphs, and the representation of data. Where possible, the techniques are illustrated with real-world applications.

VOLUME 2 consists of Modules 5–9 and is intended for mathematics students. The emphasis here is on the manipulative skills which are necessary prerequisites for most mathematics courses beyond GCSE standard.

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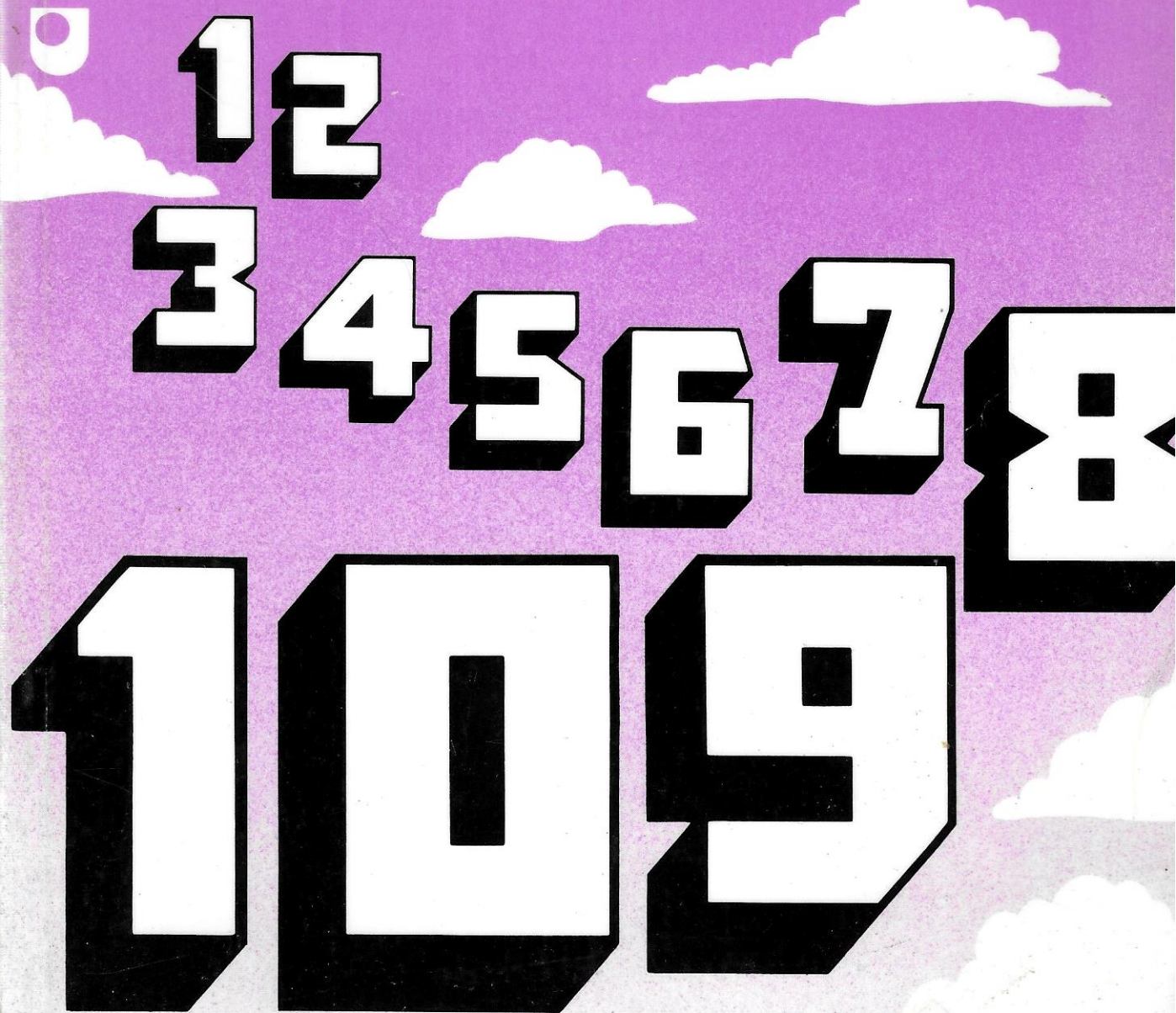


countdown to mathematics

Lynne Graham & David Sargent

Volume 2

of the Open University



Countdown to Mathematics

Lynne Graham and David Sargent, Faculty of Mathematics, The Open University.

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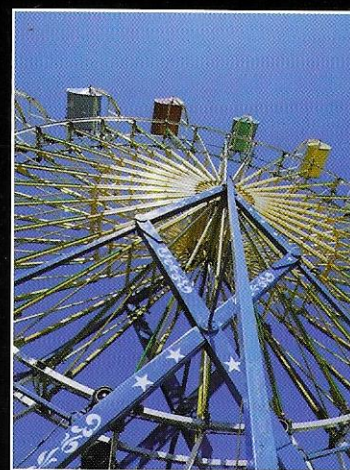




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Computer Book A



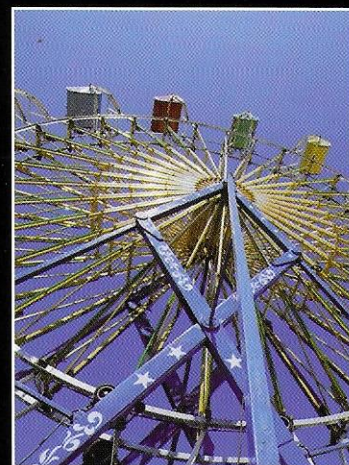
Mathematics and Modelling





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Discrete Modelling





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Computer Book C



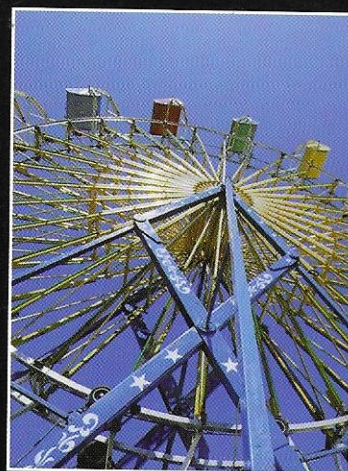
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Modelling Uncertainty





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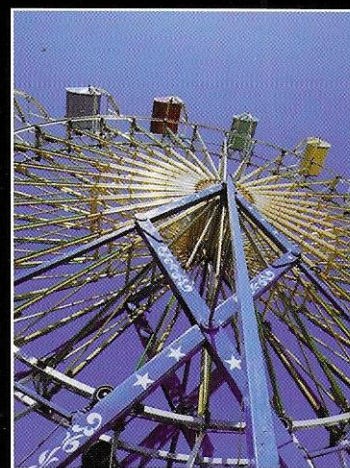
MST121
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Revision Pack



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Chapter A0

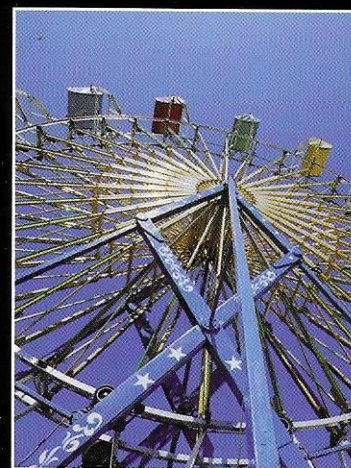
Starting points





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Chapter A1

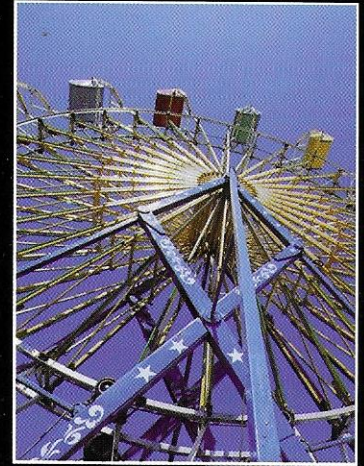
Sequences





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Chapter A2

Lines and circles





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Chapter A3

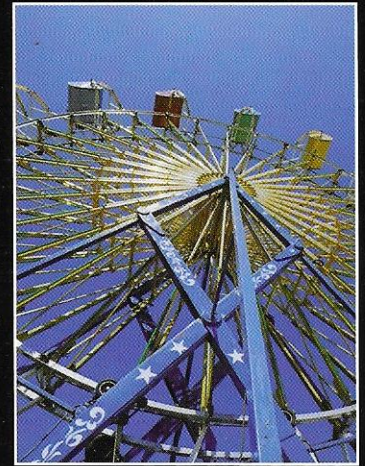
Functions





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Chapter B1

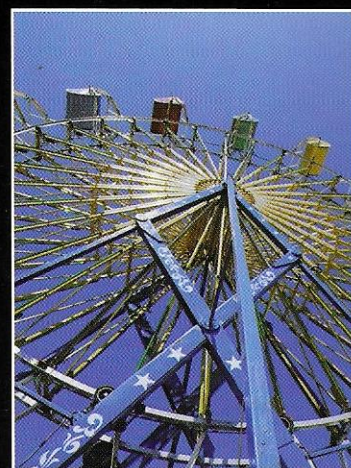
Modelling with sequences





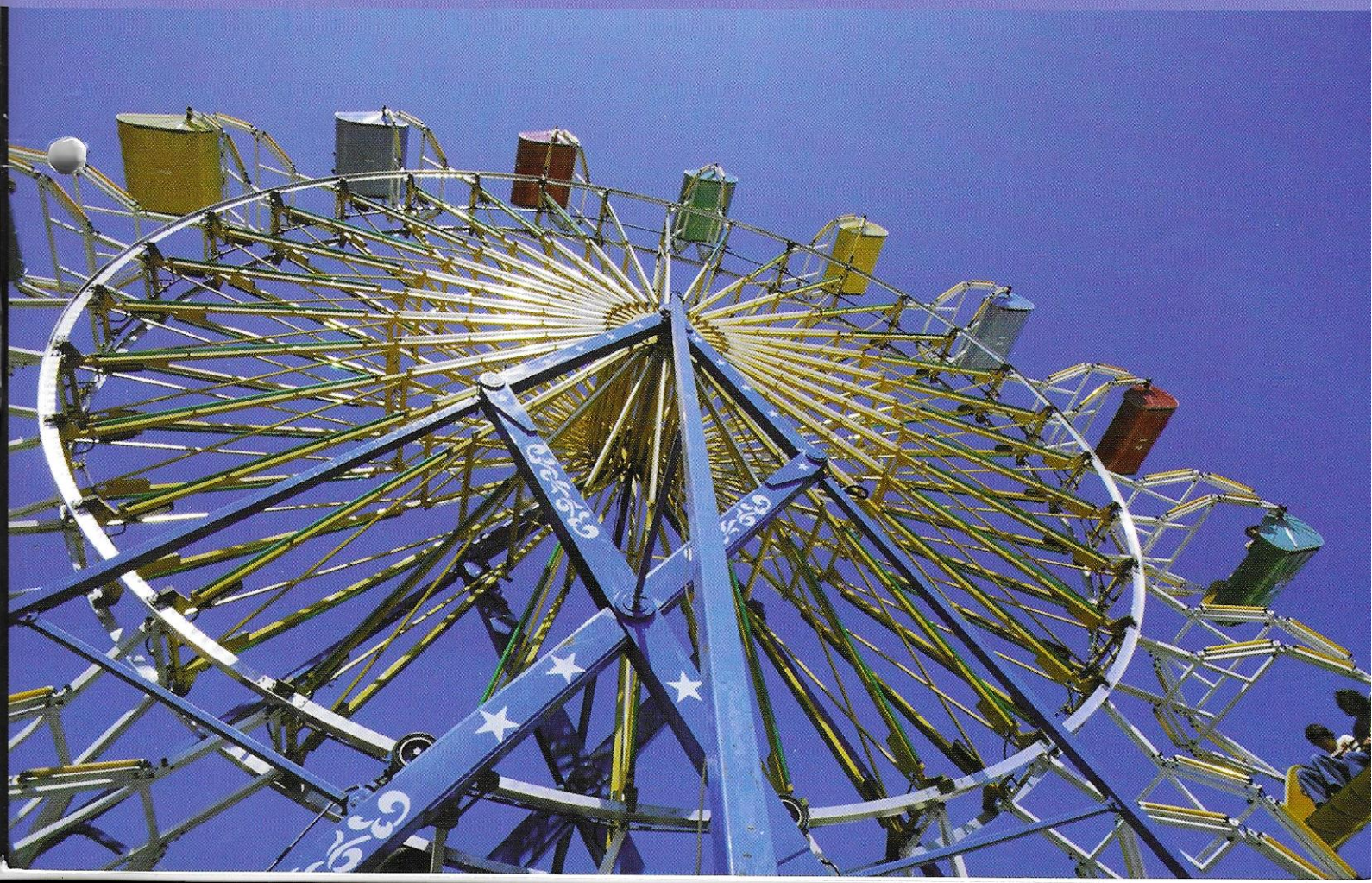
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Chapter B2

Modelling with matrices

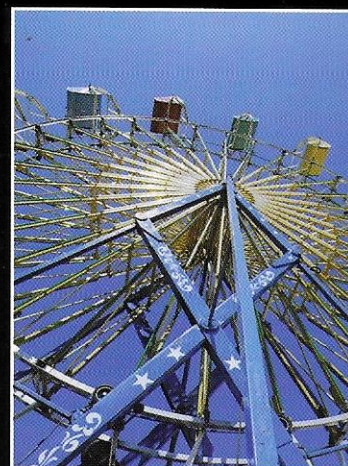




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Chapter B3



Modelling with vectors

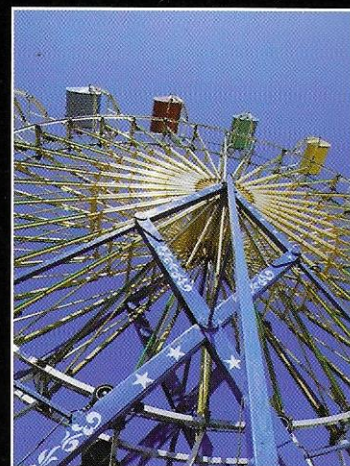




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Chapter C1



Differentiation and modelling





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Chapter C2

Integration and modelling

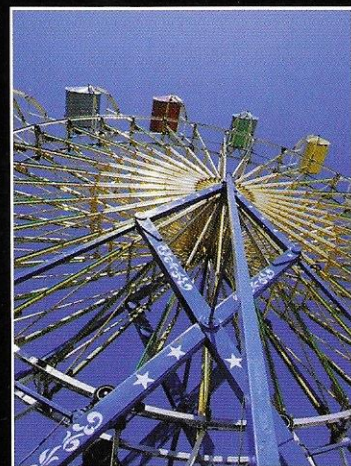




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Chapter C3



Differential equations and modelling

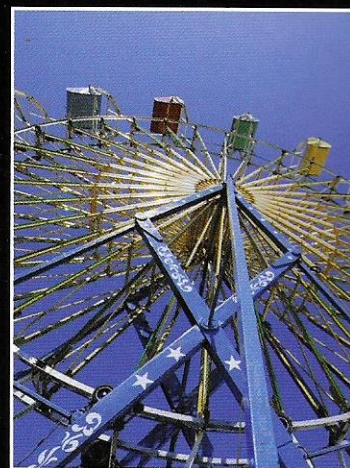




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Chapter D1



Chance

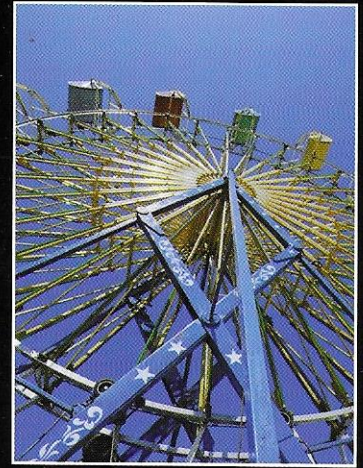




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Chapter D2



Modelling variation

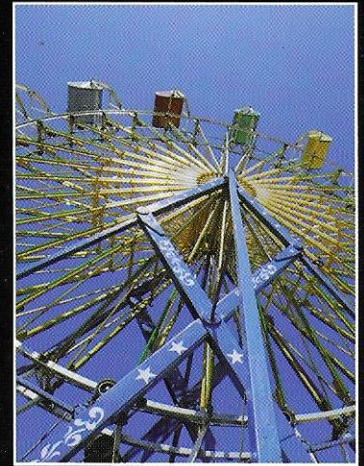




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Chapter D3



Estimating

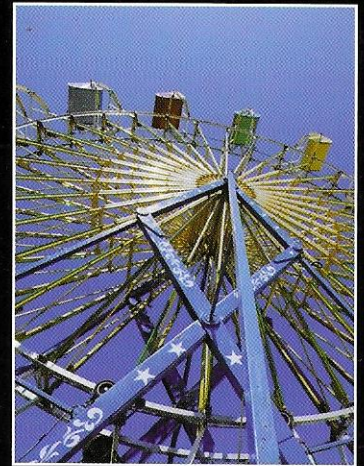




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Chapter D4



Further investigations





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Preparatory Resource Book A

Modules 1–4



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Preparatory Resource Book B

Modules 5–7



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Resource Book A

Units 1–5



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Resource Book B

Units 6–9



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Resource Book C

Units 10–13



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Resource Book D

Units 14–16



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Unit 0



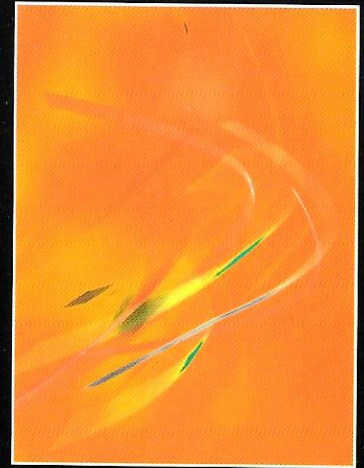
Preparing for Open Mathematics



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Open Mathematics

Unit 1



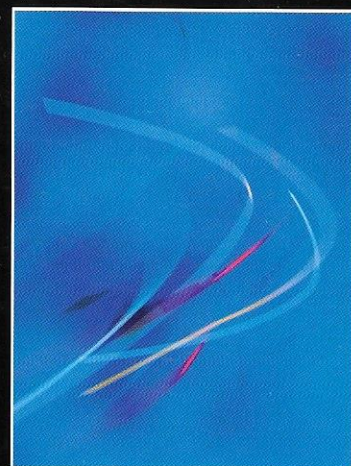
Mathematics everywhere



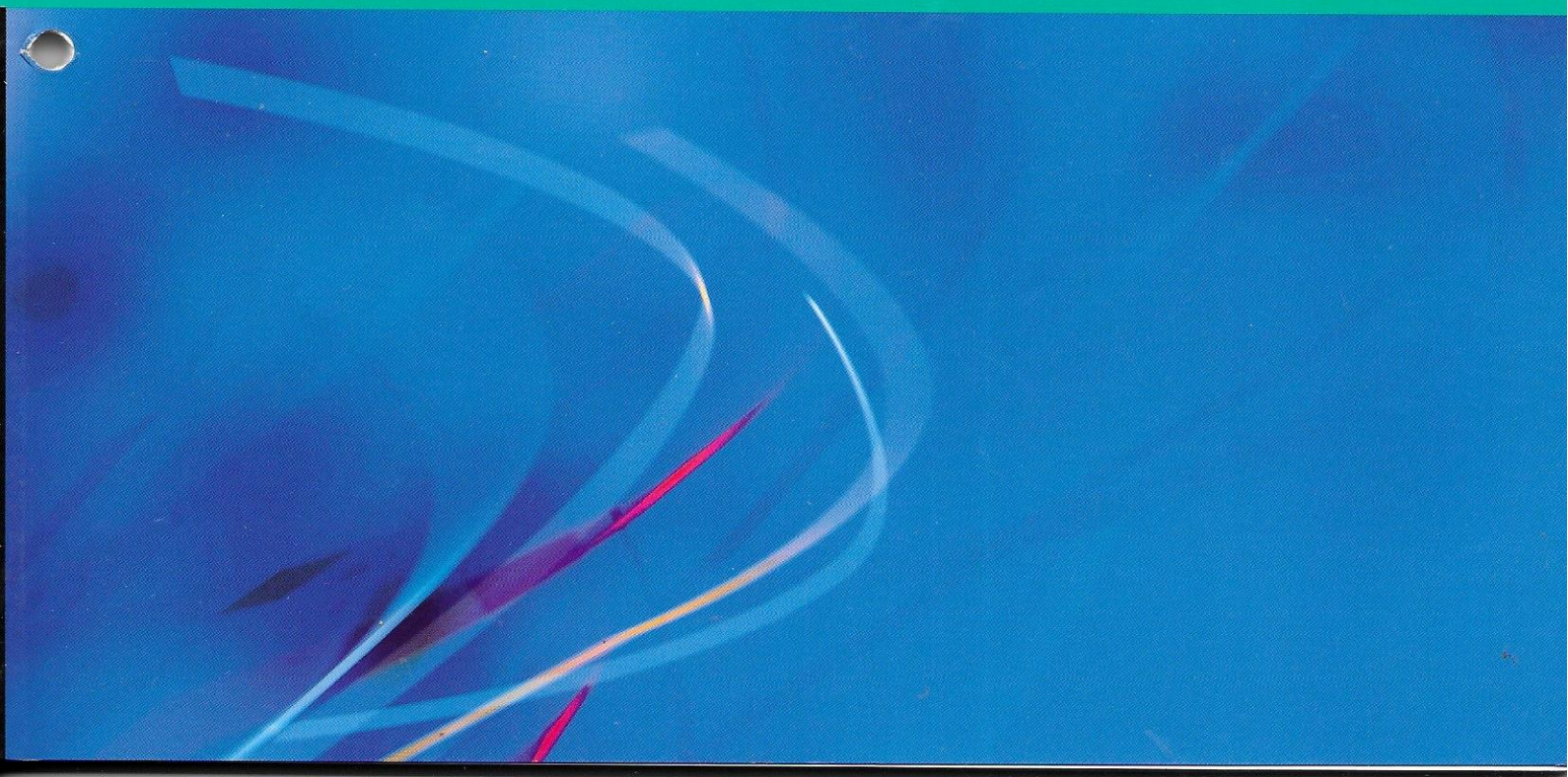
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Open Mathematics

Unit 2



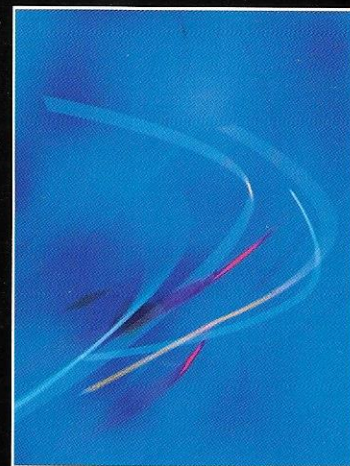
Prices





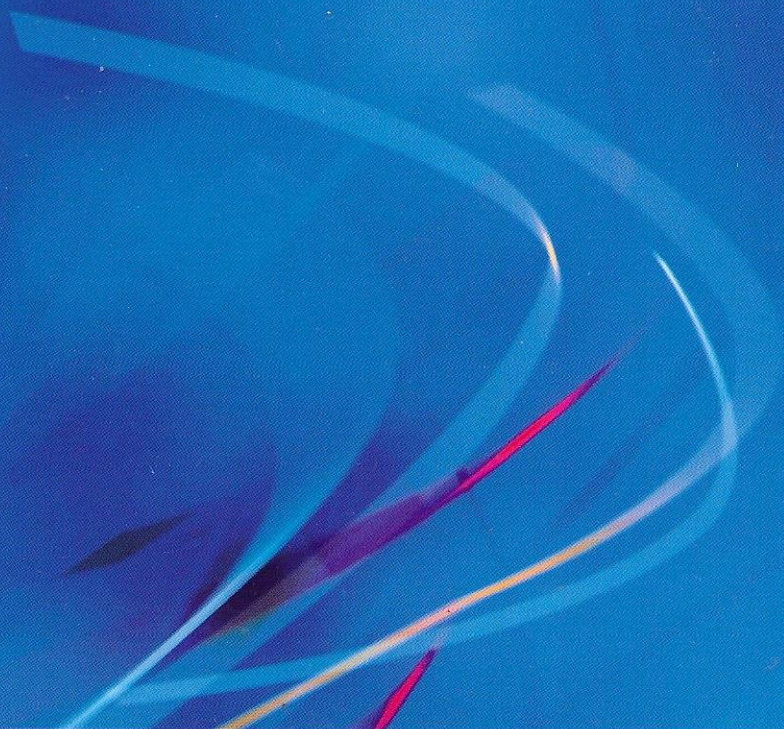
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Unit 3

Earnings

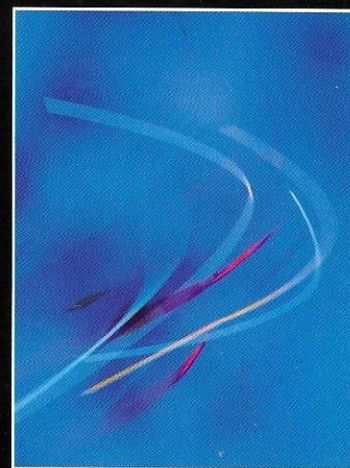




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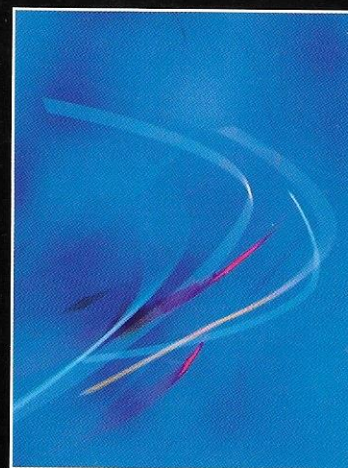


Health



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Unit 5

Seabirds

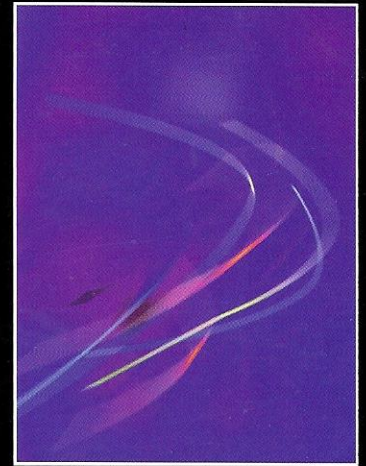




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Unit 6



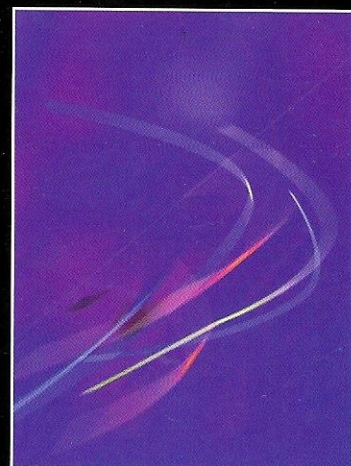
Maps



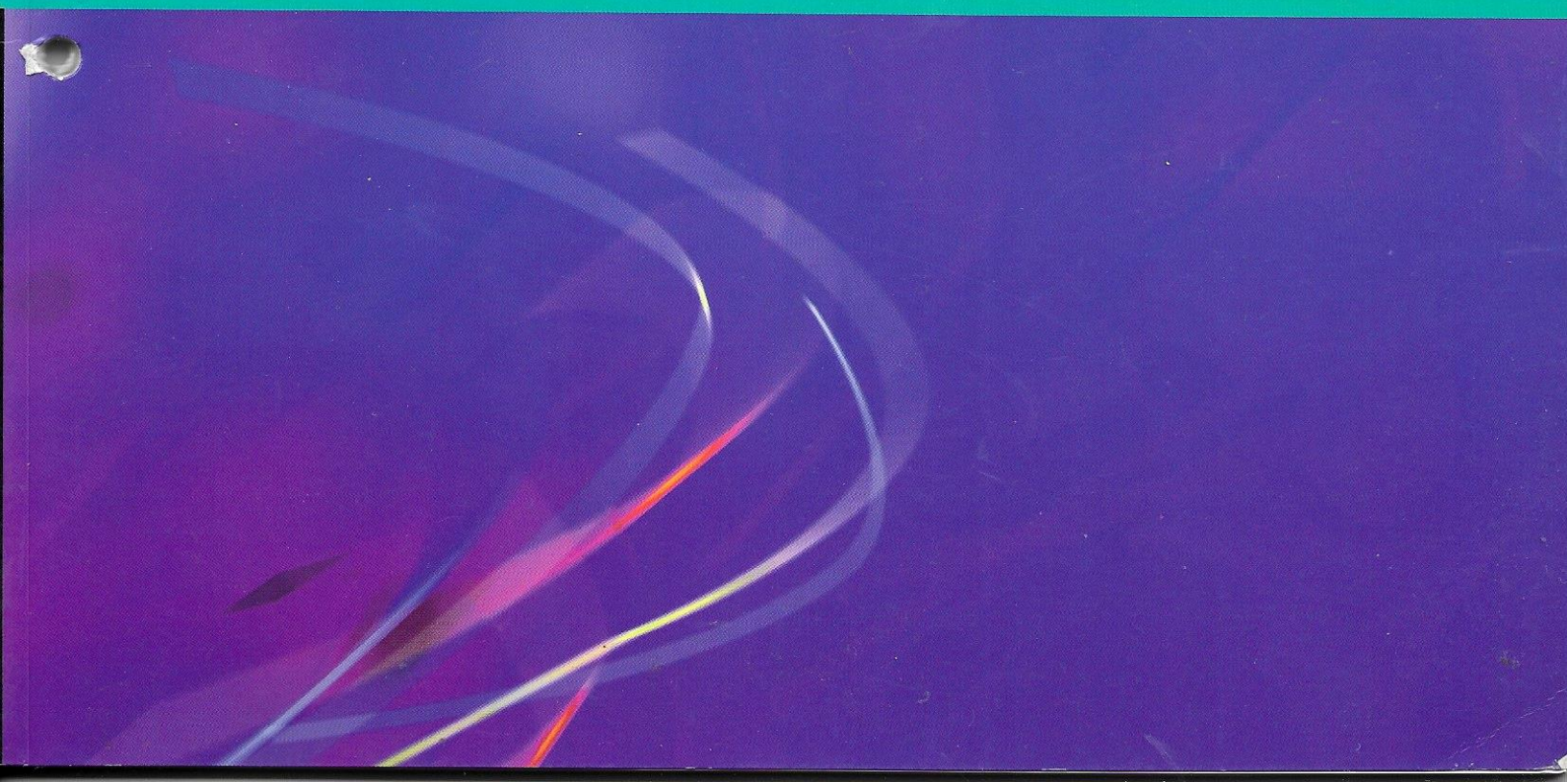
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Graphs

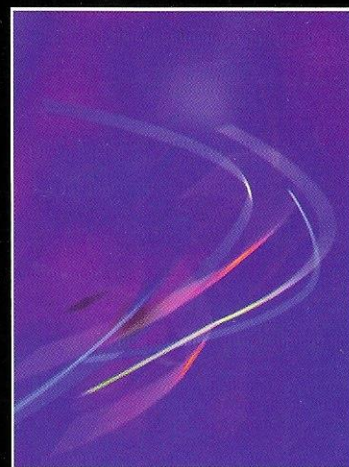




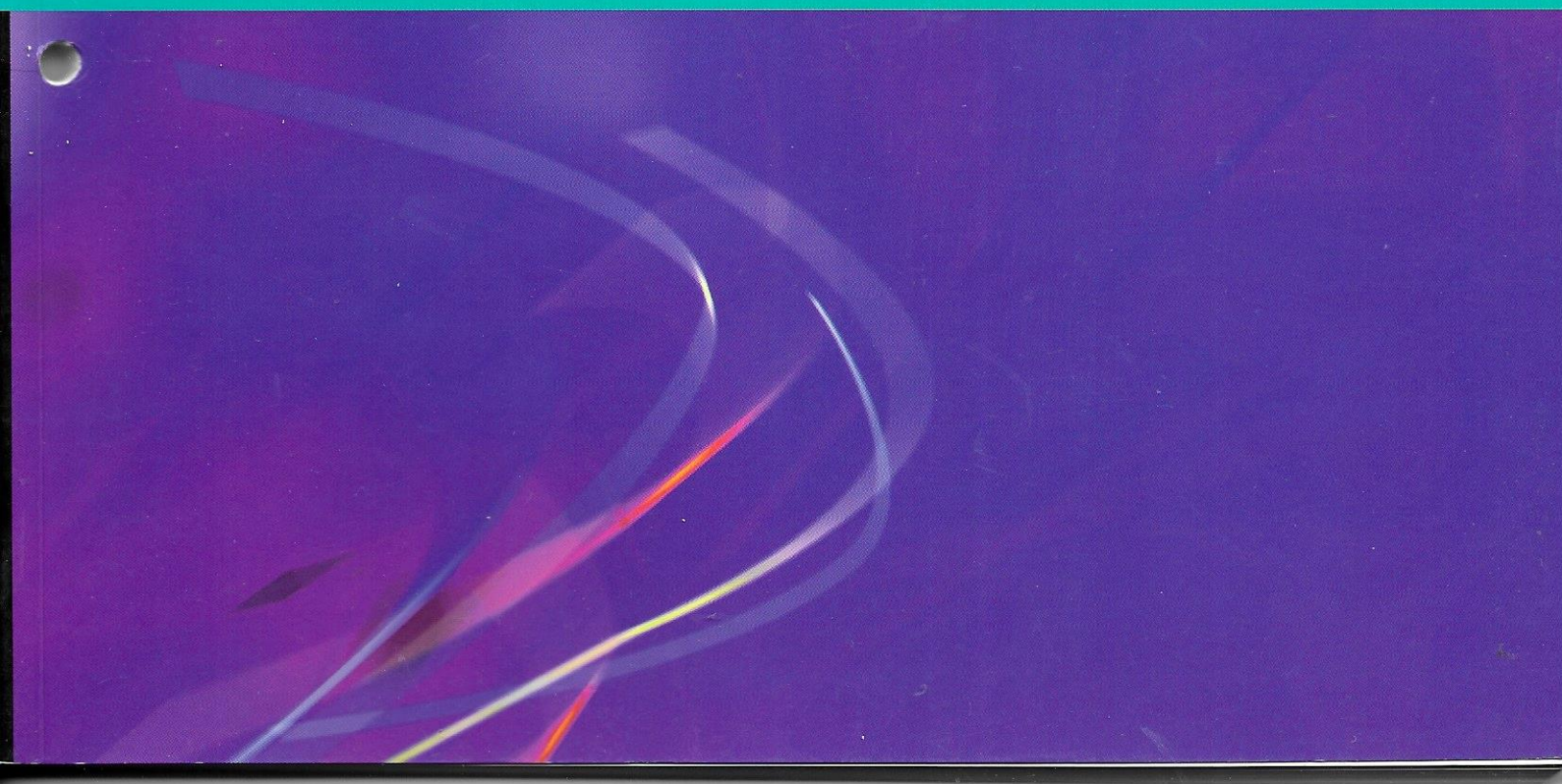
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Symbols





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Unit 9



Music

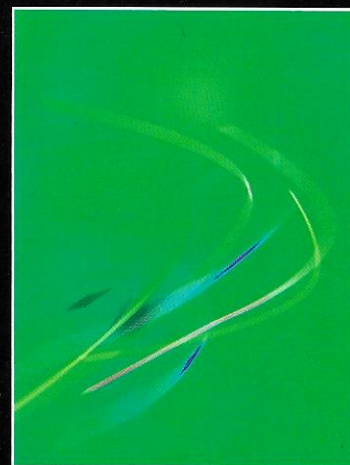




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Prediction





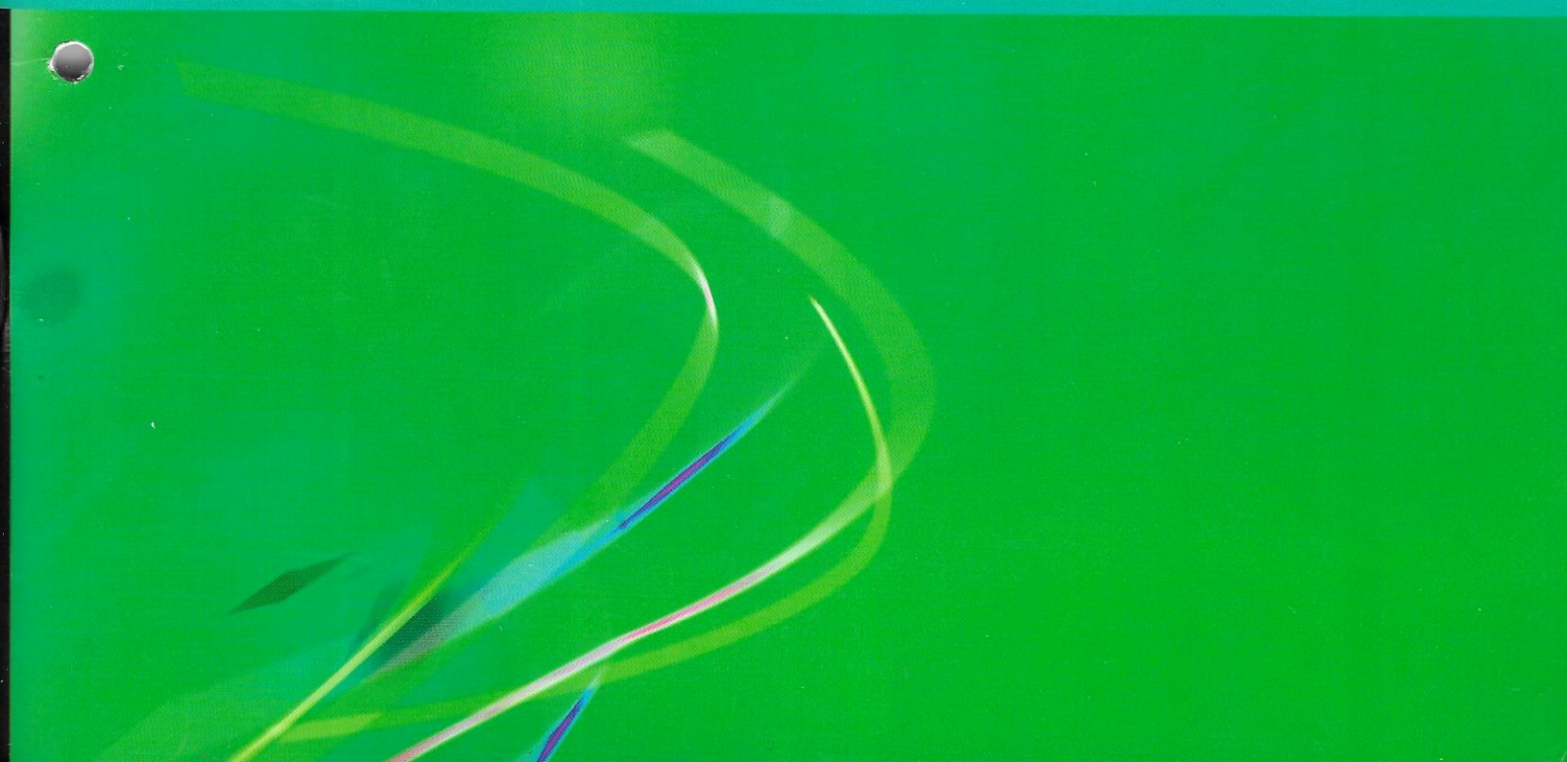
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Unit 11



Movement





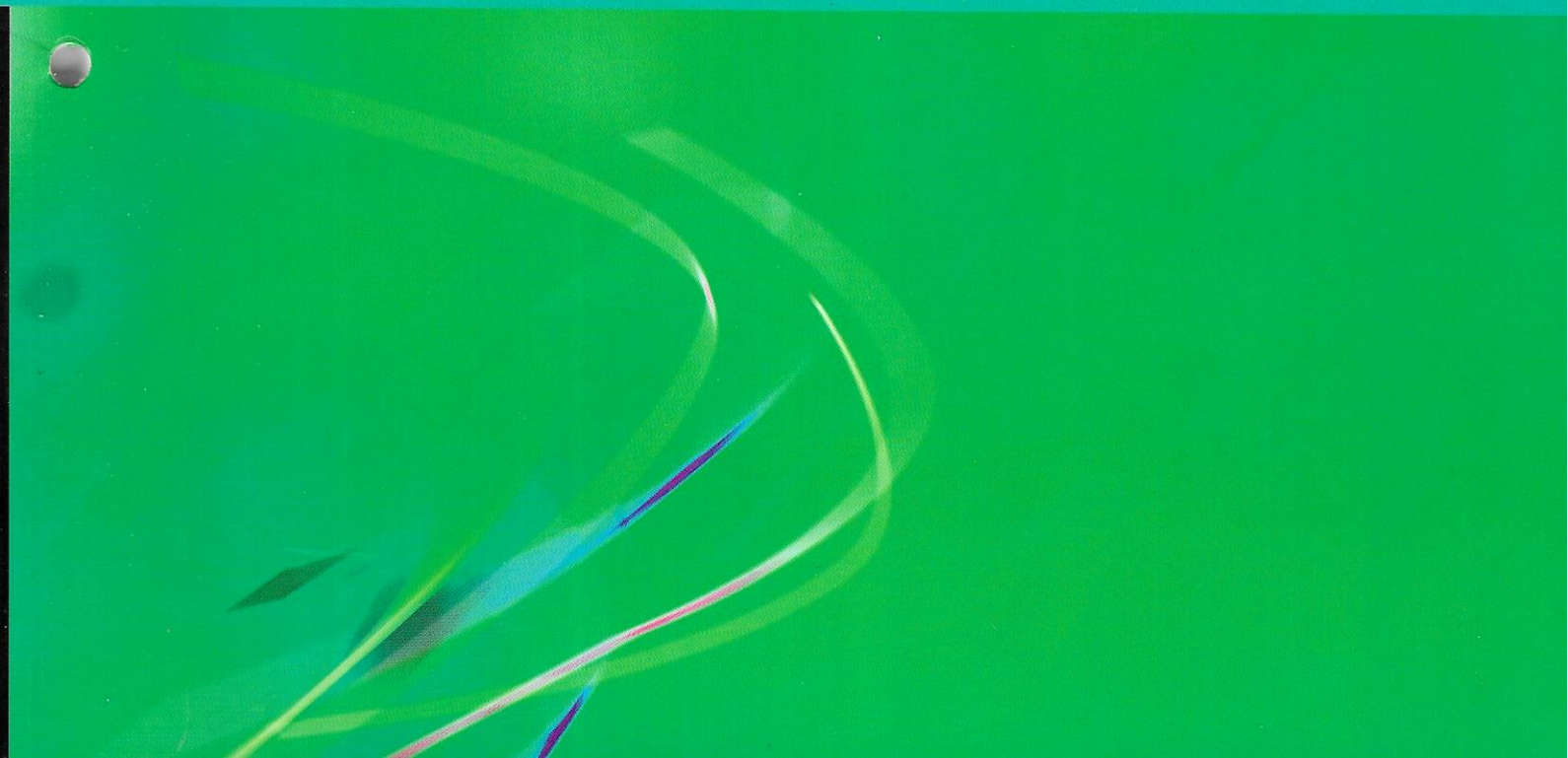
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Unit 12



Growth and decay





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Unit 13



Baker's dozen



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Unit 14



Space and shape



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Unit 15



Repeating patterns





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Unit 16



Rainbow's end



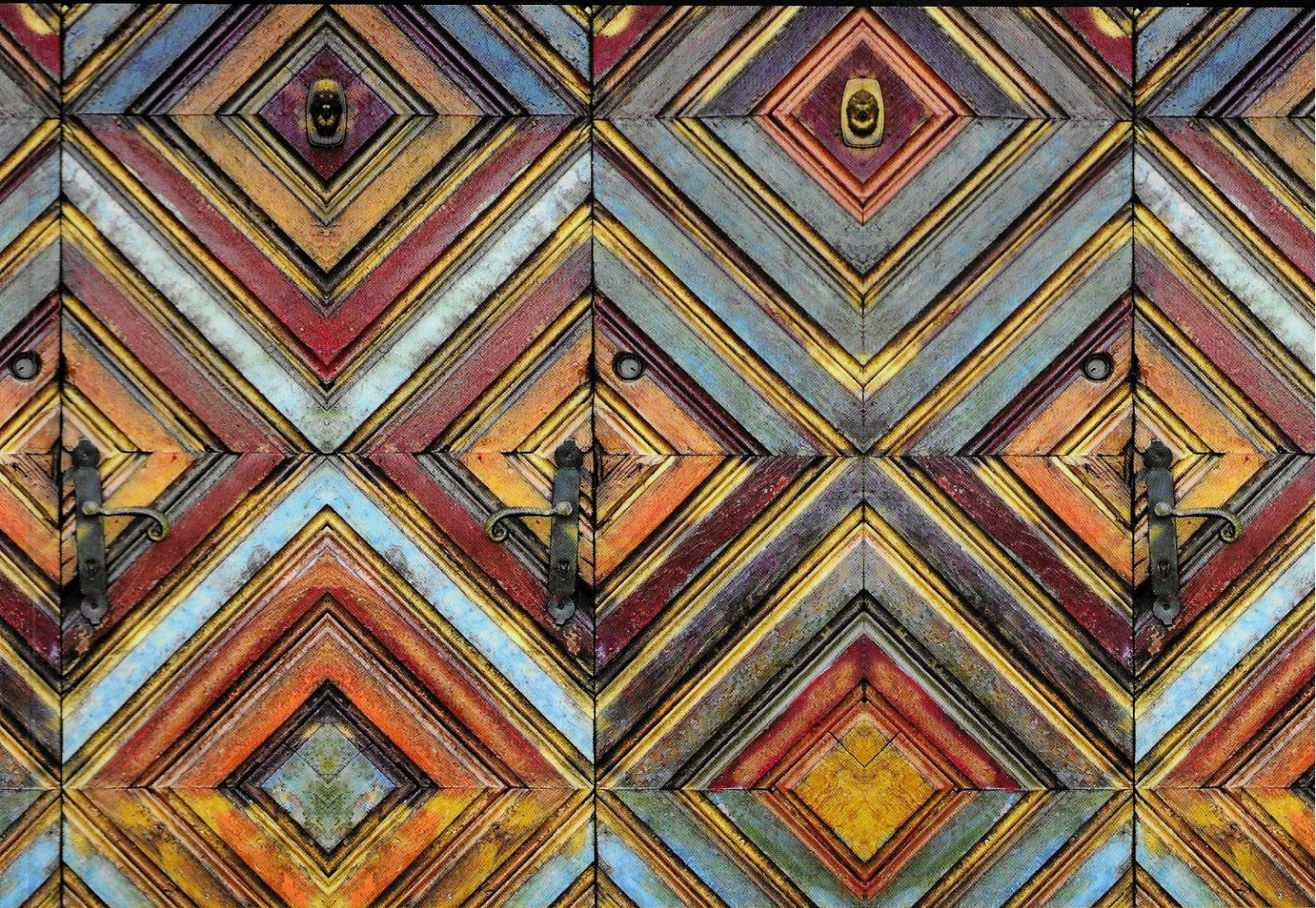


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BOOK A





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BOOK B



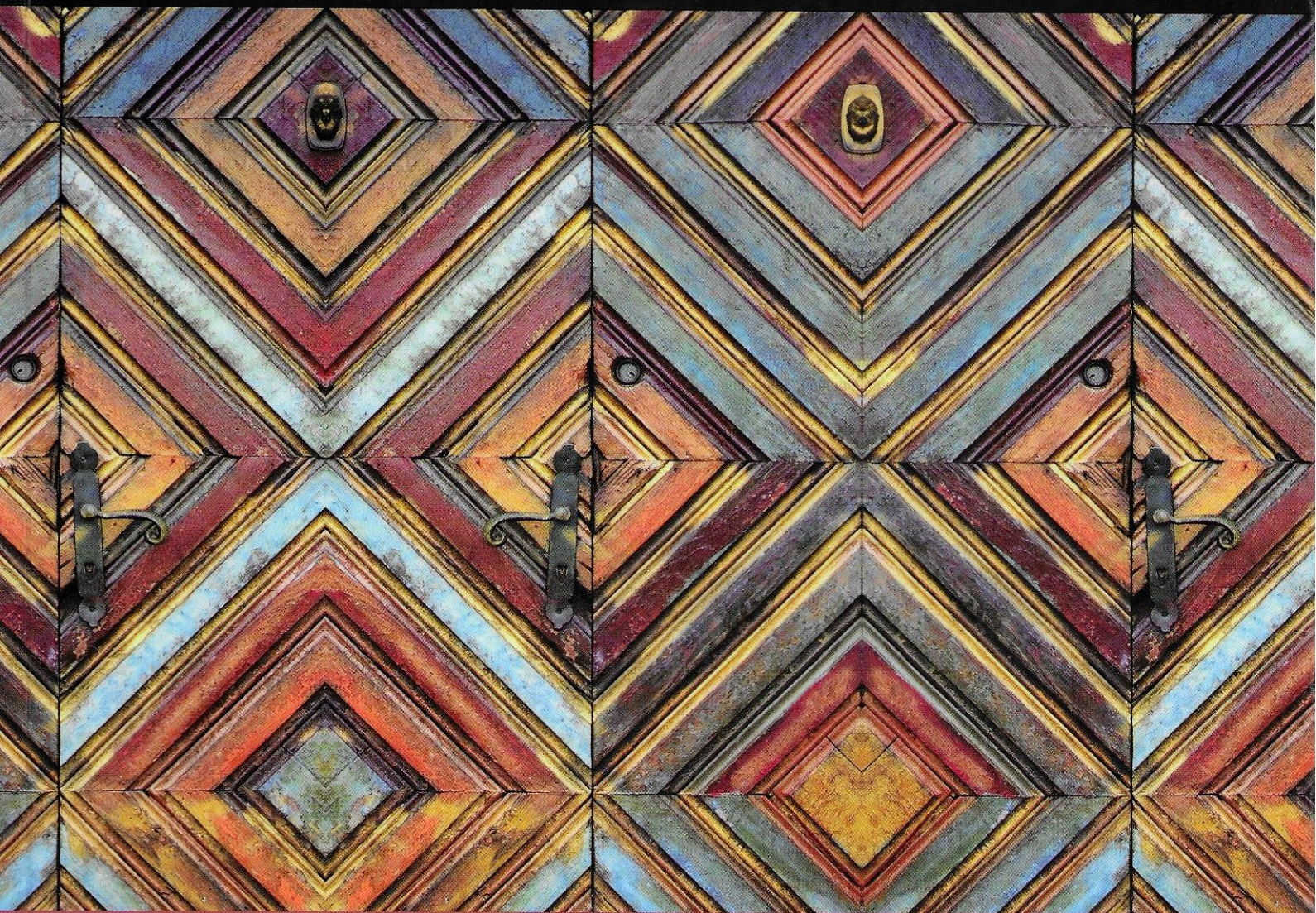


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BOOK C



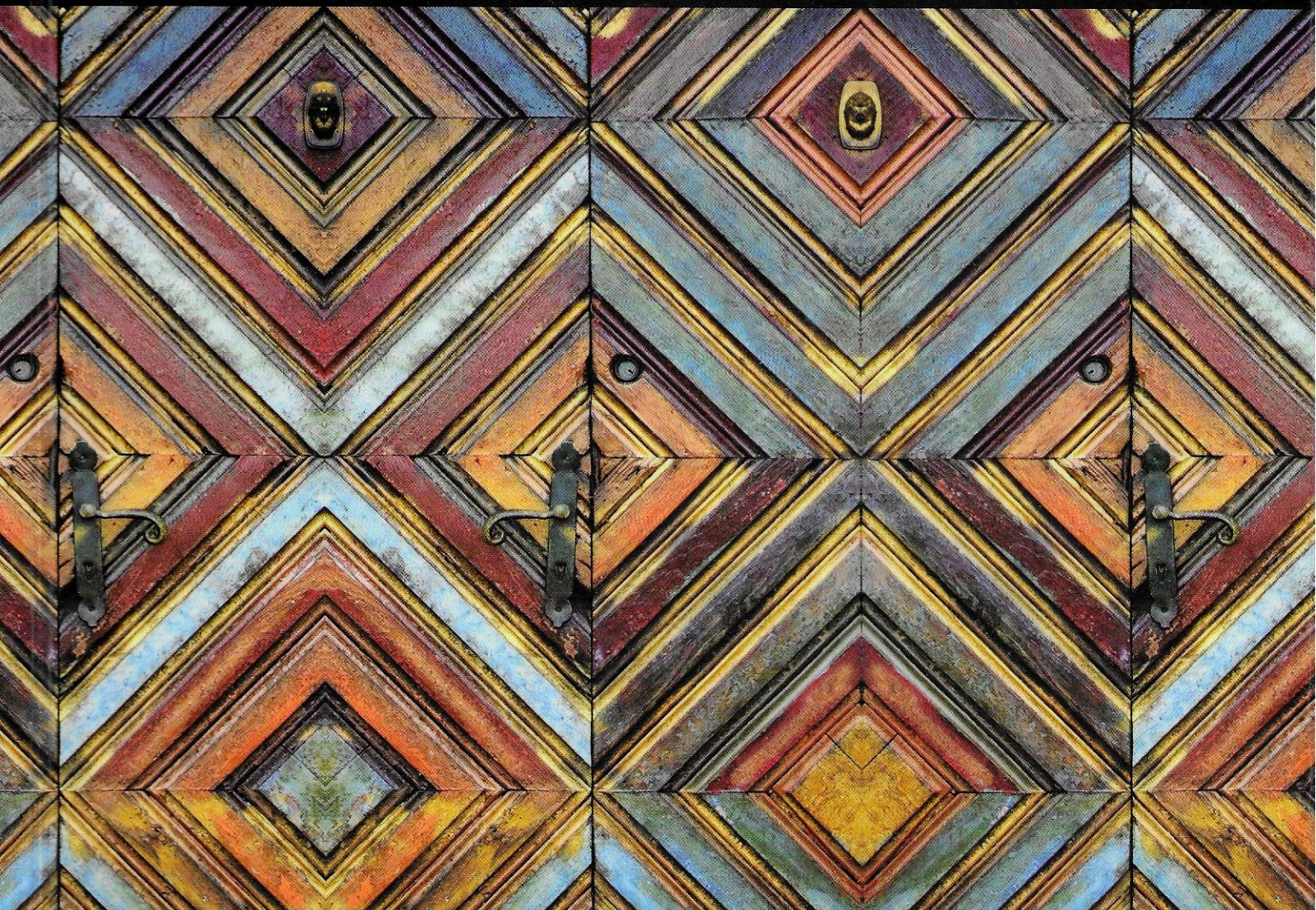


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BOOK D



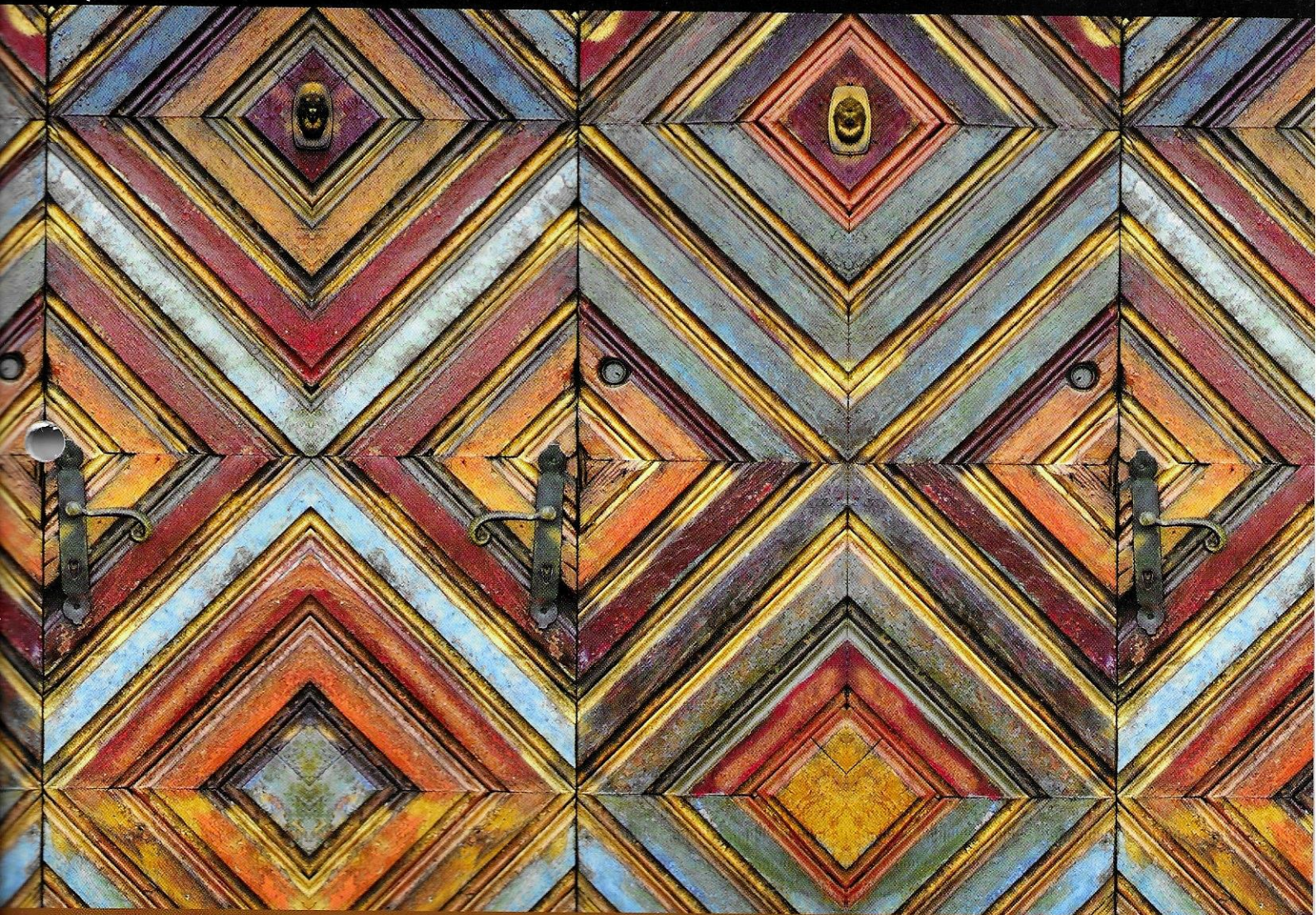


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COURSE GUIDE





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HANDBOOK

